FAMOR
Drilling & Well Control Services

# Safety Competency Management (SCM) Professional Development Program

May 2020

This document is focused on Professional Development Program, as a single-side (not integrated) program with details in execution phases

These programs are developed in close collaboration with our clients. We would welcome the opportunity to discuss your Professional Development Program and how we can support them. Contact us by phone or email to learn more.

## Safety Competencies Management (SCM)

With heightened awareness placed on safety and legislative occupational health and safety, employers are not only requiring staff to complete their job tasks, but they have to do so while fulfilling many safety requirements. Employees must not only complete their job tasks independently to a standard level of quality, they must also do so in a safe and timely manner.
Employers from all industries strive to have the most competent employees providing the highest levels of service and safety on their staff. Using competency tools can assist employers in ensuring staff does have the proper **knowledge**, **skills**, **abilities** and **behaviours** for optimal job performance, and provide them with a level of confidence that their staff is going to be able to successfully complete all aspects of their jobs while not sacrificing the quality of service or safety.
Typical competencies contain some safety elements, but it is not the main focus. The Famor Safety Competency Management outlines detailed, safety centred observable knowledge, skills and attitudes which will allow employers to promote, evaluate and drive competencies specifically related to knowledge & safety. This will afford employers greater confidence that their staff will be successful in completing all aspects of their jobs without sacrificing quality of service or safety.

## What is Competency?

There are many definitions of what 'competence' is and this probably reflects that it's a complex concept, you
know it when you see it (or more often when you don't see it), but it's difficult to describe, generally Competency is informed by knowledge (or learning) and experience, the UK Health & Safety Executive
*"COMPETENCY IS COMMONLY DEFINED AS: THE ABILITY TO UNDERTAKE RESPONSIBILITIES AND PERFORM ACTIVITIES TO A RECOGNISED STANDARD ON A REGULAR BASIS."*

However, it is important that experience is not seen just as a simple measure of time in the job – it is the quality and the frequency of experiences that a person has had during this time that brings real value in terms of competency development.
And, of course, this is particularly relevant when looking at Safety Competencies Management (SCM). When assessing safety competencies, or indeed competency for emergency preparedness, we must consider a broad combination of **technical skills**, **thinking skills** and **interpersonal skills**. The core elements of these are:

1. **TECHNICAL SKILLS –** these are task related – and will require a certain level of underpinning technical knowledge and understanding. Technical skills will develop with experience.
2. **THINKING SKILLS –** these are more generic – and will include decision making, problem solving, planning and time management skills – as well as the ability to follow instructions or directions and carry out procedures.
3. **INTERPERSONAL SKILLS –** these are behavioral-based and will include team working and communication skills, along with other specifics such as listening, collaboration and conflict management.

## Why Use Competencies?

Employers can implement competency use in many situations. Employers can use competencies during the pre-hire process in the recruitment, assessment and selection processes. Competencies can also be incorporated in the current organizational structure through performance management systems and the development of training programs.
Using competencies, whether they are skill-based or safety-based, has benefits for both the employer and employee. The workplace benefits can include the following:

- Employees achieving a high level of competence quickly and efficiently
- Employees acquiring the ability to make effective decisions in response to sudden changes in the work environment outside of their normal everyday roles, such as responding to a fire
- Increased staff independence due to an increase in knowledge and skills
- Improved communication and working relationships in the work environment

In addition, this framework provides strong foundational information for HR professionals to assist in implementing staff development programs such as:

- Documentation of employees' acquisition of knowledge, safety requirements and procedures relating to tasks
- A positive feedback mechanism about an employee's training achievements and on the job performance
- Providing job standards for performance appraisals
- Providing a method for evaluating career advancement potential

Often competencies can be viewed by employees as strictly part of an evaluative process and staff may be unable to see the many benefits that the use of competencies can hold for them. Competency benefits for employees include:

- A safer workplace
- A systematic and flexible method for acquiring and recognizing new skills and knowledge
- Increased confidence for both the employee and supervisor since the training system ensures adequate training is provided before an employee assumes responsibilities
- Accurate documentation of all acquired skills and knowledge including safety training
- Increased potential for job satisfaction

## Why Implement the Safety Competency Framework?

Implementing the Safety Competency management can benefit an organization in several ways. For an organization that has an existing safety program, implementing the Safety Competency management allows the organization to add a specific safety performance evaluation method to their program allowing them to assess the safety program's effectiveness. For an organization without a safety program, the management system provides the organization with an effective method to gauge employee knowledge and performance while also establishing the foundation for further development of a safety training program and continued educational plans. Since specific

observable behaviors are outlined in the Safety Competency management, it may be easier for staff to clearly understand what safety behaviors look like, and therefore easier for staff to emulate.

Implementing the Safety Competency management is a proactive way for employers to positively impact their injury prevention potential. The management system clearly outlines the safety behaviors and actions to allow workers to complete their tasks, while minimizing the risk of incidents. The structure and use of the safety competency management illustrates an organizational commitment to an environment of safety as well as better equips organizations in addressing and investigating incidents. Furthermore, utilization of the management system allows organizations to adhere to safety legislative requirements and thus demonstrates due diligence.

## How to achieve competency?

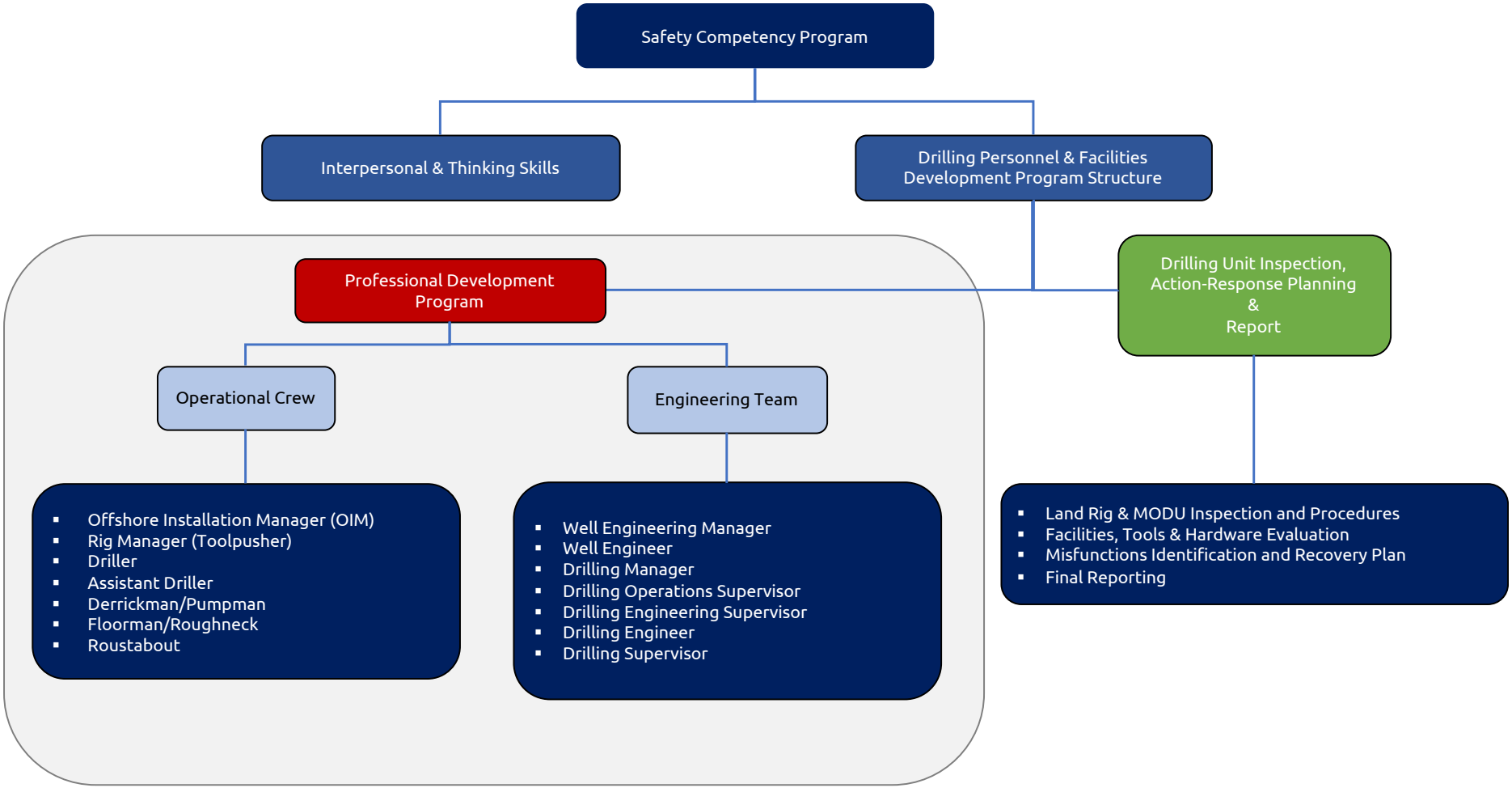
The competency management provides a set of skills, knowledge and behaviors that can be used by managers and staff to lead and take responsibility for their own learning and development.

- Each organization must establish competency standards for its personnel scalable with their roles and responsibilities and train them according with those established standards.


- Each individual's development needs will vary, depending on the role, level, aspirations and sector. The emphasis on specific core or behavioral competencies may differ from one company to the next, due to size, structure or culture.

## Competency and repetition

Faced with the challenge of maintaining high levels of competency over time, employers must work to strengthen memory by employing learning techniques that are designed to aid retention – and which allow for regular repetition to enhance recall further.
This is where regular verification combined with on-the-job training can help to ensure that safety competencies are being maintained.


Safety Competency Program
Interpersonal & Thinking Skills
Drilling Personnel & Facilities Development Program Structure
Professional Development Program
Drilling Unit Inspection, Action-Response Planning & Report
Operational Crew
Engineering Team
Offshore Installation Manager (OIM)
Rig Manager (Toolpusher)
Driller
Assistant Driller
Derrickman/Pumpman
Floorman/Roughneck
Roustabout
Well Engineering Manager
Well Engineer
Drilling Manager
Drilling Operations Supervisor
Drilling Engineering Supervisor
Drilling Engineer
Drilling Supervisor
Land Rig & MODU Inspection and Procedures
Facilities, Tools & Hardware Evaluation
Misfunctions Identification and Recovery Plan
Final Reporting

## Accreditation & Quality Assurance

Due to high standards established for this program, only training schools, establishments, companies and organizations accredited by valid institute, such as IADC, IWCF, RelyOn Nutec, Falck, ADS and etc. would be able to hold courses based on the FDS Competency Training Program. Any other training companies must be checked and verified by FDS team. When training courses are conducted by other training institutes or companies, Famor Drilling Services will liaise with the companies to avoid duplication of effort.

## Purpose of Document

Core objective of this document aims to enhance skillsets of operational personnel and engineering team and also improve drilling machinery functionality and prepare an action-response plan. It will define the training course requirements and clarify accrediting procedure of those who are going to get promoted to new position or new hired personnel.

## Compliance Structure

This framework is aligned with international standards and follows every single regulation represented by international authorized organizations.
IADC GATEWAY®
IADC Offshore Competency Training Program
RelyOn Nutec/Falck Training Matrix

Also, we received different supports from:

Aberdeen Drilling School Technical Team
Kingdom Drilling Technical Team
Marketec

## Certification

Personnel who attended in this program, are going to be accredited in their current positions or achieve new levels of competency for future positions. The program is fully flexible and different perspectives of this framework should be clarified in joint forums within client's teams and Famor technical team:

- IADC certification in case of pass the IADC Courses
- RelyOn Nutec certification in case of pass the RON Courses
- FDS certification which is valid for life and does not need to be repeated or renewed for every position

## Drilling Personnel & Facilities Development Program & Skills Accrediting Procedures

(This program is the part of Safety Competency Management framework)

Drilling contractors and companies seeking for technologies and regulatory updates to increase their abilities and maximize projects efficiency. This will be depended on 2 main factors; **Workforce** & **Facilities**.
Working in any drilling site/unit or in engineering office either, requires specific skills, training and competency to ensure that designs and plans are undertaken safely and professionally parallel to daily operations and emergency situations handling. In addition, drilling companies and operators need to reduce NPTs and operational risks by inspecting, maintaining, re-providing and planning as a holistic response to any tool misfunctions and facility anomalies. This is achieved by having operational crews and engineering teams with the right competencies, incorporating education, training and experience to undertake the tasks expected of them. And also, maintain and renew machineries to utilize full function of drilling units and facilities during different operations.
Famor Drilling & Well Control Services has worked in specific manner to create a comprehensive multi-phase integrated program to address the skills professional development, drilling unit and machinery function inspection as the two core necessary elements for individuals and companies to conduct efficient designs and executions.

The program structure is divided in 2 general sections which are reconcilable with clients' criterion; it can be prepared and delivered in each single section individually.

- **Professional Development Program;** which is applicable for both operational crew and engineering team. The role-specific program will go through several phases focused on general, safety, technical, software and analysis core competency to ensure that key personnel are fully trained and assessed for operation, design and planning.

- **Drilling Unit Inspection, Action-Response Planning & Report;** which will evaluate and investigate all existing gaps in drilling units and machineries; then will offer specific action-response plan for any hardware and tools in order to facilitate maintenance procedures or renewing requirements. This will show a touchable view of machineries' functional statues and recommend best solutions to maintain and increase tools life-span.

**Professional Development Program**

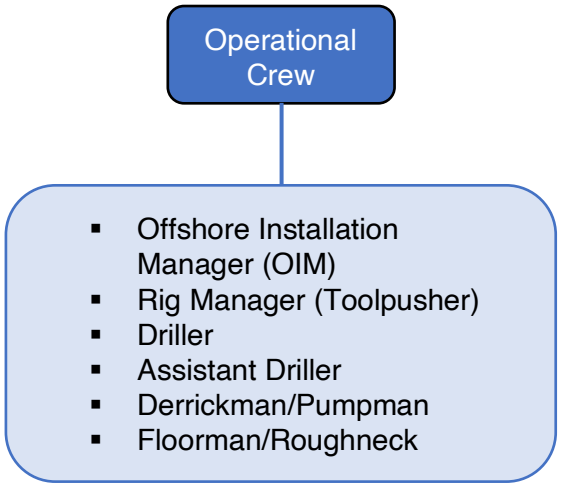
There are 6 elements considered as the main strategy of industrial development infrastructures in both Operational and Engineering programs which should be applied during different executive phases. The complex of elements clarifies workforce inabilities and lack of knowledge and ensure companies to find the best solutions and overcome.

Therefore, we need to focus on 2 main categories:

- Operational Crew Professional Development Program
- Engineering Team Professional Development Program

## Operational Crew Professional Development Program

Drilling operational personnel are always in frontline of actions and are facing with series of probable hazards every day. They need to be updated to control different technical and safety situations and perform in efficient way. Also, organizational promotions should be followed by minimum international standards. In this regard, Famor Professional Development Program is developed to ensure training and competency structures are applied to individual-key-roles in 5 separate phases. These will be applied during **Onboard** and **Rest** weeks which are known as **approaches** (6 weeks of Onboard & Rest) in this document.




### Program Structure

**Pre-phase**; **Qualification Session**
A role-specific pre-assess will illustrate an overview of personnel qualification stage and let us to manage the time restrictions and deliver the best solutions.
**Phase 1**; **General Trainings & Safety Orientation Program**
The program will define necessary HSE and hands-on topics which should be learned and applied by any position. Also, it will recommend various ideas to help increase productivity and safe operations.

**Phase 2**; **Technical & Equipment Program**
Topics which are represented in this program is classified based on operational crew duties. Different abilities such as basic knowledge, position-specific duties, calculations, equipment handling and operational techniques are crucial areas which should be covered by personnel.

**Phase 3**; **Prerequisite & Client-based Program**
Companies have been made their own skills and knowledge frame based on different experiences after years of activity; also, they have many policies which are not globalized and consider as internal checkpoints. these are helpful procedures which will be updated to get fitted in fresh and standardized framework.

- Through these phases, skillsets are delivered with support of Blended learning trainings; Classroom-based Trainings, Workshops, Simulations & Self-study activities; and Computer-based Trainings (CBT), such as Self-paced Virtual Experience (SPVE) and Instructor-led Virtual Experience (ILVE) are utilized to be the workforce skill and practical-set of knowledge.

**Phase 4**; **Functional & Practical Assessment**

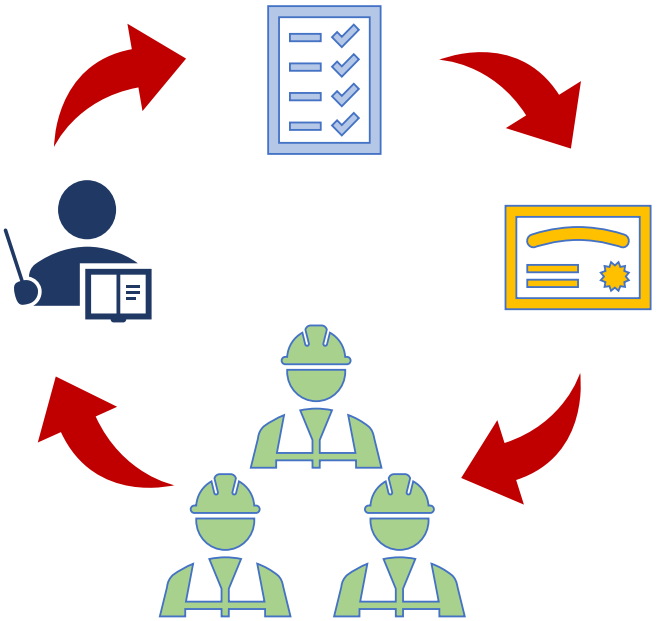
Meanwhile planning and execution of previous mentioned phases, companies need to acknowledge crew improvements. It will let different companies track personnel changes and renew their plans based on it.

2 types of functional and practical assessments should be conducted during program execution;

1- Daily reports and checklists of under assessment candidate should be prepared and sent by Drilling Supervisor or OIM to Famor Drilling Services. This type of assessment will cover the phase 1 in training program.

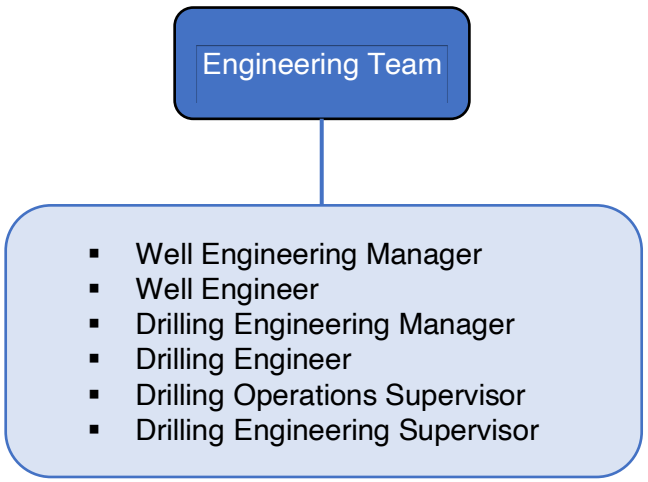
2- On-site visit and site audit are considered as the second assessment for phase 2 which will be arranged and conducted by Famor Drilling Specialist aligned with customer headquarter.

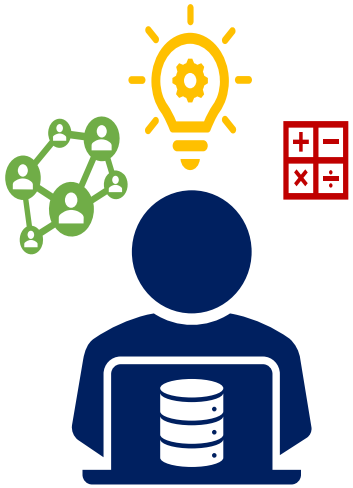
After the final approach, FDS specialist should prepare final report based on filled checklists, reports and site audit. In case of failure for any reason, candidates should pass another onboard period and review session. Candidates will be assessed by FDS specialist once more to assure proper practical progression has been made.



## Engineering Team Professional Development Program

Engineering team working as the main design and execution back-elements; clear operational visions, theoretical skills, software knowledge and managing capabilities are considered as the most important factors to ensure safe and efficient operation and well delivery.



### Program Structure

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**Phase 1**; **General Trainings & Safety Orientation Program**
The program will define necessary safety topics which should be learned and applied by any position. Also, it will recommend various ideas to help increase productivity and safe operations.

**Phase 2**; **Technical & Simulation Skills Program**
Topics which are represented in this program is classified based on individual positions in engineering offices. Different abilities such as theoretical knowledge, software skills, duties and operational comprehensions are crucial areas which should be covered by engineers.

**Phase 3**; **Management & Analytic Skills Program**
This program is focused on personal abilities in project handling process; establishment, development and project delivery should follow a well-clarified path to reach the target. People in charge need to be aware of different components in project management and apply them in real-life projects.

**Phase 4**; **Prerequisite & Client-based Program**

Companies have been made their own skills and knowledge frame based on different experiences after years of activity; also, they have many policies which are not globalized and consider as internal checkpoints. these are helpful procedures which will be updated to get fitted in fresh and standardized framework.

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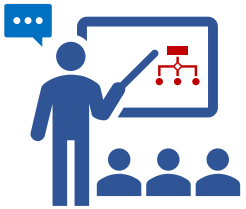
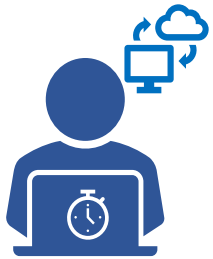


**Phase 5**; **Engineering Assessment**

Meanwhile planning and execution of previous mentioned phases, companies need to acknowledge crew improvements. It will let different companies track personnel changes and renew their plans based on it.

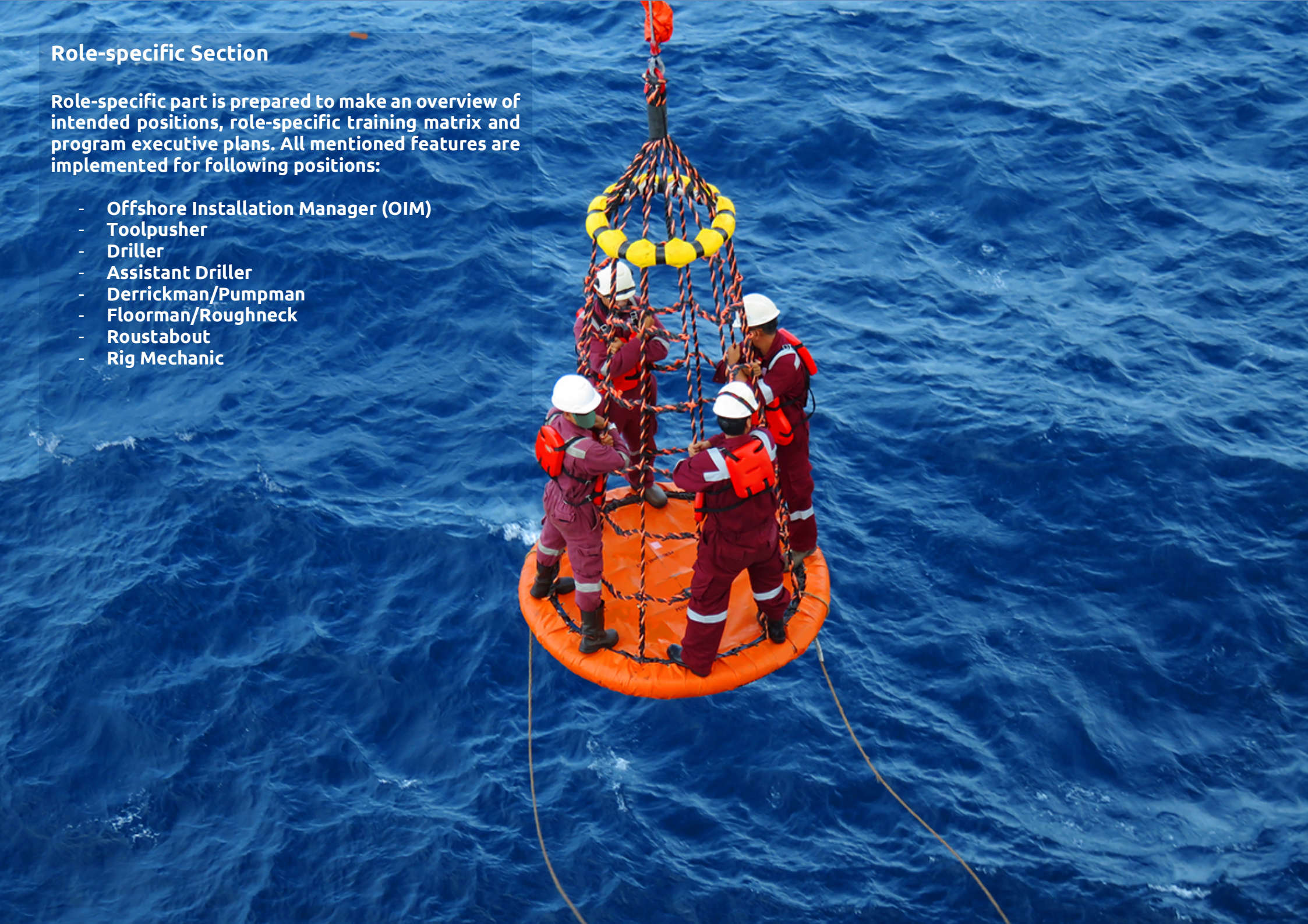


Seasonal assessments will be planned to conduct for 2 or 3 times in this training program. This will help to track improvement, analyze the skill gaps and provide the best solution.

## Role-specific Section

**Role-specific part is prepared to make an overview of intended positions, role-specific training matrix and program executive plans. All mentioned features are implemented for following positions:**

- **Offshore Installation Manager (OIM)**
- **Toolpusher**
- **Driller**
- **Assistant Driller**
- **Derrickman/Pumpman**
- **Floorman/Roughneck**
- **Roustabout**
- **Rig Mechanic**



## Roustabout Program

The Roustabout position is responsible for supporting the oil and gas operations. The position is diverse and may vary on a daily basis. The Roustabout works with equipment he is qualified to operate such as backhoe, Caterpillar, maintainer, forklift, trencher, trucks and trailers, water trucks, picker truck, vacuum truck, and so forth. Roustabouts typically work difficult shifts that be more than twelve hours long, so they need to be physically fit and have the stamina for hours of manual labor.

Duties include but are not limited to:

- Tank installation and repairs
- Dig pits and lines
- General cleanup
- Install motors on equipment
- Set well equipment at well locations which includes cement pads and pumping units
- Responsible for tie-down of pumping units and installing counterweights for balancing pumping units
- Install and repair pipelines
- Haul pipe and rods
- General yard maintenance of ground and buildings
- Haul gravel for tank battery location and road upkeep
- Clean up oil spills
- Must be proficient with all tools including air and electrical

## Roustabout Training Program Sample

| *Phase 1* | **Roustabout General Trainings & Safety Orientation Program** | | | Duration | |
|---|---|---|---|---|---|
| A | **Famor Safe On-Rig Program® (Blended Learning)**<br>**(Based on IADC RigPass®)**<br><br>Delivered though Self-paced Virtual Experience (SPVE):<br><br>+Hydrogen Sulfide (H2S) Awareness<br>+ H2S Respiratory Protection Awareness (OSHA)<br>+ Transportation Dangerous Goods by Air<br>+ Transportation Dangerous Goods by Sea<br>+ Abbrasive wheels<br>+ Scaffolding Awareness | **or** | **RON Self-paced Virtual Experience (SPVE) Program**<br><br>+IADC RigPass - Digital Learning<br>+Hydrogen Sulfide (H2S) Awareness<br>+H2S Respiratory Protection Awareness (OSHA)<br>+Transportation Dangerous Goods by Air<br>+Transportation Dangerous Goods by Sea<br>+Abbrasive wheels<br>+Scaffolding Awareness | **5 days or Approx 16 hrs self-paced** | **83 hrs (14 days) or 74 hrs (10 days) (Blended Learning)** |
| B | **BOSIET (HUET included)** | | | **3 days** | |
| C | **Banksman Offshore (can be delivered through Roustabout Technical Program)** | | | **3 days** | |
| D | **Member Fire-fighting and Rescue Team Offshore** (For Senior position) | | | **4 days** | |
| E | **IWCF - Well Operation Crew Resource Management (WOCRM) (SPVE)** | | | **6-8 hrs self-paced** | |
| *Phase 2* | **Roustabout Technical & Equipment Program** | | | Duration | |
| A | **Drilling Engineering & Operation** | | | **3 days** | **40 hrs (Blended Learning) + 8 hrs (SPVE) (Total 9 days)** |
| B | **Roustabout Technical Program** | | | **5 days** | |
| C | **IWCF Awareness Prograam (SPVE)** | | | **6-8 hrs** | |
| D | **Oilfield English Knowledge** (Recommended) | | | - | |
| *Phase 3* | **Roustabout Prerequisites & Customer Training Program** | | | Duration | |
| A: Prerequisites | 1) Medical examination fitness Certificate<br>2) Medical + Breathing apparatus examination fitness Certificate | | | - | **16 hrs (3 days)** |
| B | **Helicopter Landing Officer (HLO)** | | | **2 days** | |
| D | **Forklift Driver/Forklift Safety** | | | **1 day** | |
| E | **International Safety Management (ISM) Code** | | | - | |
| F | **Integrated Management Systems (IMS)** | | | - | |
| *Phase 4* | **Roustabout Functional & Practical Assessments** | | | Duration | **Plan-based** |
| | | | | **Total Duration** | **20-25 Days** |