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Subsea Engineering Competency Profile



FIELD DEVELOPMENT PLANNING FUNDAMENTALS

FDP-001

This competency demonstrates a subsea engineer has a broad awareness of:

- The range of industry-proven field development architectures including production, processing, infield and export transfer of hydrocarbons and supporting infrastructure.
- The relative merits of different system architectures considering CAPEX, OPEX, operability, reliability, availability, maintainability, constructability, HSE, decommissioning and other factors.
- The options and implications for sequencing of a field development on key project drivers.

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- The characteristic drivers for different groups involved in development, delivery and operation of developments and how these can influence behaviours and strategies of different parties.
- Interface engineering practices with a diverse range of stakeholders including reservoir, drilling, completions and facilities engineering teams.
- Assessment of a range of development concepts and selection of a preferred option.
- The typical activities required during feasibility/ concept select/ concept definition phases of a development

This competency enables a subsea engineer to have an awareness of project objectives and the constraints imposed by others and how they influence subsea system architecture. The subsea engineer will be able to interface with key interdisciplinary groups and articulate key design drivers and engineering implications for the subsea assets in the context of the overall development.

ELEMENT OF COMPETENCE	WHAT THIS COMPETENCE MEANS IN PRACTICE	INDICATORS OF ATTAINMENT Refer to only as many Indicators of Attainment as you need to demonstrate the Element of Competence
Awareness of legislative frameworks, fiscal, commercial and economic requirements for projects Working knowledge of: issues, complexities and drivers for related offshore engineering disciplines interface management methods and strategies	Recognises and understands the role of different disciplines in contributing to the overall subsea system architecture Identifies elements of design which may have implications for other project stakeholders Raises interface queries, responding to queries from others and recognising key drivers for successful resolution	Has worked on 2 or more field development concept selection studies. Has experienced at least one of the following stages: Design Fabricate / Manufacture Installation Operate

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Generation and comparison of development concepts with a view to selection of a preferred option	Influences the broader project architecture and resolves challenges / issues which may arise. Able to perform the role of interface management in successful project delivery	Has worked on preparing, managing or resolving interdisciplinary interfaces on at least one front-end project
	Able to manage and optimise subsea architecture in the concept engineering phase	
	Understand how a preferred subsea design may influence an overall concept development decision	

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