

*Guidelines for a*

# **PROJECT EXECUTION PLAN**

## 1. OBJECTIVES

The objectives of this guideline are:

- To provide a standard template for Project Execution Plans (PEP);
- To identify the critical items which need to be included in all PEPs;
- To show how the PEP can be used as an organising structure for all project plans;
- To ensure that the key issues of value enhancement and risk management are properly addressed in the PEP.

The document is written as a guideline and therefore represents a recommended standard methodology which needs to be adapted to the specific PROJECT. Individual projects may deviate from, or modify, the content described here wherever such deviations can be justified.

## 2. SCOPE OF THE PROJECT EXECUTION PLAN (PEP)

A PEP should reflect as much as possible the generally accepted Project Management Best Practices – see for instance the PMP® handbook.

The PEP is the primary document which defines how the project will be undertaken. It is a companion document to the Field Development Plan (FDP), which defines what the COMPANY are trying to achieve.

The PEP details the specific activities, resources and organization to be applied, demonstrates how the project's quality and HSE requirements will be achieved, and how the project objectives will be met by the proposed method of execution.

The PEP represents a key deliverable for the Project's Sanction Gate.

A PEP is structured to include a number of formal, stand-alone plans for particular areas of project process, e.g. HSE Management Plan, Quality Plan, Value Management Plan etc.. The typical PEP contents listing are provided in the Annex and include references to such plans and a proposal for a list of their contents. It is expected that the PEP will provide simple reference to these formal plans by document number, and that (other than perhaps a philosophical overview) details of the plans will not be repeated within the body of the PEP.

The latest revision of these individual plans will therefore always be applicable.

The PEP will therefore act as a guidebook to how the project will be managed, providing the necessary signposts towards other associated documents. The PEP need not itself be a large document.

The plan for a particular project process may have to be tailored to the phase or to the project element (e.g. the quality plan for onshore activities may differ in specific details from the quality plan for offshore activities). Care must therefore be taken to ensure that there is conformity and lack of conflict between PEPs for sub-projects and sub-elemental areas of a project. The high level, over-arching PEP for the complete project should be the governing document and always take precedence.

### 3. MAIN CHARACTERISTICS AND ACTIVITIES

#### 3.1 BASIC PRINCIPLES

The basic principles to be applied when developing a PEP are:

- Consistency and compliance with the others key project documents (e.g. the Field Development Plan)
- Multidisciplinary (compiled from stand-alone plans and procedures covering a broad range of project disciplines)
- Use –10% +15% accuracy on cost and schedule estimates (ideally based on at least 80% in value from tender responses)
- High level perspective

The PEP is where the strategy for implementing the Execution phase is laid out. The PEP therefore sets the project management framework and an overall direction for the Project that has been understood and bought in to both by the Project Team and COMPANY's senior Management, as well as by Project stakeholders.

Additionally, at a high level, the PEP provides the reasons for the strategies adopted, explaining how alternatives have been challenged and how the available resources are to be optimised to meet project objectives.

#### 3.2 PEP ACTIVITIES OVERVIEW

Normally, the PEP will cover all activities performed during the Execution Phase of the project under the management of the Project Team. This typically includes:

- facilities design, fabrication and construction/installation
- procurement and supply of materials
- well drilling and completion
- hook-up, pre-commissioning, commissioning and handover to Operations
- Operations and maintenance planning
- all supporting functional and technical activities/processes (e.g. value management, logistics, etc.)

Activities which are not normally within the scope of the PEP include:

- activities of the various committees (e.g. Operating committee, contractors committee, technical committee etc.)
- commercial negotiations and agreements
- activities of the legal departments
- senior management interactions with third parties, government agencies etc.

#### 3.3 MANAGEMENT OF THE PEP DOCUMENTATION

The PEP is usually approved and owned by the relevant Project Manager and he/she should approve all document revisions. On all projects there should be a formal document control mechanism in place and the PEP should be managed as a 'controlled' document. The PEP,

together with its referenced standalone plans, should be made available to all project stakeholders.

### 3.4 INTEGRATION WITH OTHER DOCUMENTS

The PEP is the highest level project execution document, and is effectively an 'umbrella' for all the individual project plans, procedures, work instructions, or eventually sub-project PEPs.

It represents the ultimate source of guidance to the project team and should be the starting point when developing detailed project documentation. The PEP should specifically reference the relevant lower level documentation such as the individual project plans and Procedures.

The PEP is also an essential element of the Project HSE Management System and Project Quality System in that it specifies how these systems will be developed and applied to the project.

## **4. TYPICAL PEP TABLE OF CONTENTS**

### **SECTION 1. OBJECTIVES AND SCOPE OF THE PEP**

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- 4.17 COMMISSIONING AND START-UP
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- 4.19 DECOMMISSIONING
- 4.20 INSURANCE

A brief description of each section is included in the following pages.

## **SECTION 1. OBJECTIVES AND SCOPE OF THE PEP**

In this introductory section, clearly define:

- The objectives of the PEP: Why we need the document, and the value it adds
- Its position within the project document hierarchy:
  - o How it relates to other systems such as Project HSE & Quality Management Systems, etc.
  - o Which documents take precedence in case of conflict
- Document ownership
  - o Who approves the PEP
  - o Who maintains it
- Its scope of application
  - o Project elements - facilities onshore/offshore, drilling, associated projects (e.g. social) etc.
  - o Organizations covered, including suppliers and contractors
  - o Start and end point within the project lifecycle (e.g. Front-End Engineering through to handover)

## **SECTION 2.PROJECT OBJECTIVES AND GOALS**

### **2.1 PROJECT OBJECTIVES AND CRITICAL SUCCESS FACTORS**

- COMPANY or JOINT VENTURE corporate objectives (overall)
- Project objectives and drivers
- Critical success factors

### **2.2 PROJECT SUMMARY**

- Location
- Overview of reservoir (STOIIP, Geological description, etc.)
- Development Strategy: Overview of well patterns. Overview description of facilities', Phasing of development activities
- Project scope boundaries (battery limits)

### **2.3 PROJECT EXECUTION STRATEGY**

- Brief explanation of execution strategy only, demonstrating how and why the proposed execution strategy and plan will best meet the objectives of the project
- Major risks to project success, plus control mechanisms (i.e. how the execution strategy controls/mitigates these risks)
- Major outstanding decisions (and timing for these to be made)
- Resources summary (number of work locations, numbers of personnel at each location, available assets and infrastructures, etc.)

### **2.4 OVERVIEW OF COST AND SCHEDULE**

- Key targets and milestones
- Level of uncertainty/confidence around these (normally +/- 10% for a Project Sanction).

## **SECTION 3. ORGANISATION**

### **3.1 OWNERSHIP AND CONTRACTUAL OBLIGATIONS**

- Ownership structure
- Contractual obligations (PSA and JOA)
- Role of the National Authorities
- Governance Structure: Committees and Sub-Committees, together with their roles and responsibilities

### **3.2 PROJECT ORGANISATION**

- COMPANY (or Joint Venture) organisation
- Project organisation:
  - Organisation Strategy
  - Organisation chart / lines of communication
  - Financial delegation of authority for the project teams
  - Recruitment/Manning strategy (if applicable)
- Accountabilities, responsibilities and required competencies of key individuals
- Roles of contractors and suppliers when an integral part of the project organisation
- Relationship with the Work Breakdown Structure

### **3.3 COMPANY AND PROJECT INTERNAL INTERFACES**

Brief definition, categorisation and description of COMPANY and project internal interfaces, highlighting those that are particularly critical for the success of the Execution phase – i.e., interface with the Operations team.

## **SECTION 4. MANAGEMENT SYSTEMS, STRATEGIES, PLANS AND PROCEDURES**

### **4.1 MANAGEMENT SYSTEMS**

Reference should be made to COMPANY's Management System, and all applicable systems (Partners' management systems, etc.) which give the overall management hierarchies and approaches to the PEP, as the PEP is a key controlling document in the PROJECT management system.

The PEP should reference among others, the following Management Systems:

- HSE Management System
- Quality Management System
- Procurement Management System
- Operations Management System
- Information Management System

### **4.2 HSE**

Reference should be made to COMPANY HSE Management System. This should describe the approach taken to manage the HSE aspects of the business to ensure that COMPANY's activities are planned, carried out, controlled, and directed so that the HSE objectives are met.

The HSE strategy should be designed in order to achieve continuous HSE performance improvement, and to demonstrate that HSE related risks are managed to a level which is as low as reasonably practicable (ALARP).

Elements of the HSE MS are defined in terms of:

- the expectation of what is intended to be achieved
- the responsibility of the HSE Committee
- the performance requirements of the Operating and Project Groups

The above should also include references to HSE Standards and Guidelines.

#### **4.2.1 PROJECT HSE MANAGEMENT SYSTEM**

The Project HSE Management System should reflect the requirements of the COMPANY HSE Management System, but where necessary should be tailored to include project specific requirements.

For smaller projects, a project-specific HSE Management System could not be required. The Project HSE Management System will include the Project HAZID and Risk Registers.

#### **4.2.2 HSE PLAN**

The purpose of the Project HSE Plan is to:

- Provide a statement of the Project HSE objectives and performance and how they will be achieved over life of the Project
- Describe Project-specific HSE objectives and targets
- Describe the specific HSE management activities to achieve planned objectives, including responsibilities and competency assurance
- Describe the contingency and emergency response planning
- Describe special HSE initiatives and programmes

- Describe how Contractors' HSE management performance will be evaluated prior to selection and during the execution of the work

The Project HSE Plans should build on the deliverables and standards that are required to be met by COMPANY, its contractors and their sub-contractors throughout the execution of the Project.

The Project HSE Plan requires for a Document Management Procedure between the Contractors and COMPANY to be developed and maintained. This should clearly define the interface between the various HSE Management Systems, identifying key roles and responsibilities for each activity defined and its associated tasks, standards and procedures etc.

Contractors will be required to prepare appropriate HSE plans that ensure that the requirements set out in the contract and the overall Project HSE Plan are met. Where this is not possible, suitable interface documentation shall be developed and referred to.

#### *4.2.3 HSE AUDITING AND REVIEW*

This section should contain the integrated Project HSE Audit and Review Schedule, comprising:

- COMPANY HSE Audit and Review Schedule
- Contractors' HSE Audit and Review Schedules

#### *4.2.4 THIRD PARTY VERIFICATION FOR SAFETY CRITICAL ELEMENTS*

If applicable, this section shall include:

- Definition of safety critical elements and their Performance Standards
- Development of Written Scheme of Examination
- Methods for demonstrating that performance standards for safety critical elements have been met through Independent Competent Person Verification

### 4.3 SECURITY

- Special security risks or requirements description
- Measures undertaken for security of COMPANY and contractor personnel
- Measures undertaken for security of materials and equipment
- Plan for emergency preparedness
- Allocation of responsibility for assurance for security of site, personnel, materials and equipment between COMPANY, contractors, subcontractors and suppliers

### 4.4 QUALITY

#### 4.4.1 COMPANY QUALITY ASSURANCE PROCEDURES

The COMPANY Quality Management Systems and Procedures shall be referenced. These normally draw upon the requirements of the ISO 9001:2000 standards, and support the development process.

#### 4.4.2 PROJECT QA/QC PLAN

The Project Quality Plan should be referenced, which will apply to all activities undertaken by the Project Team and will comply with COMPANY Quality Systems and Procedures. It will form the top-level Project document that will be used to cascade the requirements for quality management throughout the Project (i.e. it will set the frame in which Contractors' quality management systems will operate).

Where appropriate, reference should be made to the appropriate terms within the contracts relative to quality.

The Project Quality Plan will restate the Corporate quality policy and objectives in the specific context of Project requirements.

The Project Quality Plan will:

- identify the processes and the application of the processes needed to realise the project goals in accordance with the quality policy and objectives
- indicate the sequence and interaction of the processes
- define how these processes are operated and controlled
- identify the resources required to implement the processes
- identify the primary accountabilities and responsibilities
- monitor, measure and analyse the processes
- define the processes of continuous improvement will be implemented, including monitoring, measurement, analysis and improvement processes and receipt of customer feedback
- demonstrate management buy-in and commitment

The Project Quality Plan shall define how the above points will be applied in all the areas of the project.

## 4.5 INTERFACES

### 4.5.1 STAKEHOLDERS MANAGEMENT PLAN

- List of identified stakeholders and their primary requirements
- Schedule, budget and quality implications of stakeholders' primary requirements
- Stakeholder analysis results containing:
  - interests, objectives and drivers
  - disposition towards Project and influence/power on Project outcomes
  - level of potential obstacles posed
  - possible strategies and actions
  - risk assessment (likelihood and impact on Project of potential actions)
- Proposed stakeholder management strategy
- Action plan (key activities, timing and resource requirements)
- Monitoring mechanisms for gathering and managing stakeholders feedback in order to identify potential weaknesses or improvement points and incorporate change in the strategic pattern

### 4.5.2 INTERFACE MANAGEMENT PLAN

The Interface Management Plan describes how the internal interfaces identified within the Project Interface Register (also referenced in the PEP) are going to be managed.

The plan should identify and categorise (critical) internal interfaces, and describe how these will be managed throughout the execution phase and by whom. It typically describes:

- functions of the COMPANY involved in the interface
- competencies involved
- objectives of the specific interface activities
- scope of the work required
- deliverables
- timing
- roles and responsibilities

## 4.6 PERMITS AND CONSENTS

A broad overview of the regulatory requirements related to permits and consents shall be provided in this section. Major outstanding issues and status of the permitting process are here described in general terms (together with Key dates for getting the necessary approvals).

Within this section different plans may be referenced within the umbrella of an overall permits and consents plan (e.g. compensation plan, land allocation plan, consultation plan, certification plan, etc.).

Project specific procedures should be referenced in this section.

## 4.7 VALUE

### 4.7.1 VALUE MANAGEMENT STRATEGY

The Value Management Strategy, which is a top level document that explains the value management approach to be exercised within the Project and provides references to other more detailed guidelines and tools, should be referenced.

The strategy will demonstrate compliance with COMPANY Value Management Systems and Plans.

Value management includes the following main areas:

- Value Assurance Process: the process for demonstrating that project value objectives have been met through activities such as Value Assurance Reviews, Peer Reviews and Peer Assists and value tracking methodologies
- Value Improvement Practices: techniques and methods used to increase project value for example by reducing costs and/or improving project attributes such as schedule.
- Decision Making Tools: the use of tools and techniques to improve decision quality
- Learning Capture and Application: the formal capture of lessons learned and dissemination to relevant areas of the project (see also section 4.8 Information)
- Risk Management Process: the process for the identification, evaluation and management of project risks

For the above areas the Project Value Management Strategy should address:

- the key project value drivers
- specific areas to be a focus for value improvement
- targets for value improvement
- methodology for achieving the targets
- how value gains are to be measured, tracked and reported
- education of the project team in value management techniques and processes
- critical success factors and how these are to be addressed
- the value assurance process to be adopted

### 4.7.2 VALUE IMPROVEMENT PLAN

The Value Improvement Plan should contain a schedule of those activities such as Value Improving Practices, Value Assurance Reviews, Peer Assists, Peer Reviews, key decisions requiring application of formal decision making processes and tools, lessons learned workshops, risk management activities and initiatives. It should identify the resources required to carry out the activities and the responsibilities of all the parties involved.

## 4.8 RISK MANAGEMENT

The Project Team has to demonstrate that all risks have been fully identified, understood, and that a plan has been defined for their management.

Reference should be made to the COMPANY Risk Management Procedures, to the project specific procedures and to the risk register and the risk management plan

### 4.8.1 RISK REGISTER

- Identified risks
- Define procedure for Risk categorization, impact area, level, manageability and priority

### 4.8.2 RISK MANAGEMENT PLAN

- Risk identification and reporting
- Qualitative analysis
- Quantitative (probabilistic) analysis
- Response planning, including timing, roles and responsibilities

## 4.9 INFORMATION MANAGEMENT

### 4.9.1 INFORMATION COMMUNICATION TECHNOLOGY (ICT) PLAN

The Information Communication Technology (ICT) plan provides a framework for the IT systems required to support the overall Project life-cycle. The plan should identify:

- The life-cycle stages that the technology platform is supporting
- Business Process that support the life-cycle stages
- External Interface Requirements
- Service Level Requirements of the Production Environment

The ICT Plan should state the life-cycle stages that are supported by the technology platform(s) in terms of:

- Cost and Schedule Management
- Management Information Reporting
- Materials Management (logistics tracking and expediting of bulks and materials)
- Construction Management (warehouse management, construction planning, allocation of resources)
- Plant Management
- Commissioning Management (completion management, plant and equipment data management)
- Health and Safety System Management (tracking of HSE policies)
- Permits, Consents and Approvals Management (database of permitting status, contracts approved, customs cleared, accepted by warehouse etc.)
- Value and Quality Management

Technology components that are common to all life-cycle stages include:

- Electronic Document Management
- Internet Portal Management
- Management Information Reporting
- Geographic Information Systems (GIS)

Within each lifecycle stage, the supporting work flows and business process should be developed to confirm the requirements of the discipline owners.

- The identification of interfaces with the technology platform may include:
- Enterprise Resource Planning (ERP) Systems
- Electronic Document Management Systems (EDMS)
- Operations

On the latter point, the interface with Operations is key and should include:

- A strategy for project execution and operation migration
- Identification of Project Technology components that will transfer into Operations (i.e. EDMS)
- Definition of all deliverables and information structure required for migration to operations

The service level requirements of the technology platform include:

- General Service Level requirements of key technology platforms across geography
- Operational running of email and web server components
- Bandwidth and availability requirements of secure and public internet connections

- Development of an infrastructure plan including office and satellite communication links
- Identification of Data Centre requirements
- Business Continuity Plan (BCP)
- Backup and Archive Strategy

#### 4.9.2 ADMINISTRATION OF PROJECT COMMUNICATION

- Partners interface and communications
- Interfaces and communications with the Authorities
- Minutes of meeting
- E-mail management
- Project correspondence
- Correspondence numbering
- Language Policy

#### 4.9.3 DOCUMENTATION MANAGEMENT

- Document numbering procedure
- Project document formatting procedure
- As-built documentation
- Document management and retrieval system (electronic or hard copy)
- Document archiving philosophy

#### 4.9.4 MONITORING AND REPORTING

Define the objectives of the reporting system and the project monitoring criteria, for example:

- To demonstrate to senior management that the project is progressing in line with agreed objectives (and if not, that suitable actions are being undertaken)
- To communicate to project team and other involved Company functions the key data and facts on project status
- To provide a summary of project progress to partners and government
- To identify areas requiring attention and/or corrective actions by the project manager and project team
- Where necessary, to enable approval of changes in budget or schedule

Describe all type of reports to be produced, including typical content, scope of the report, frequency of issue.

Describe the project monitoring and reporting system, including how the contractors' reports are rolled up into the higher level project reports, and demonstrate how the reporting system will meet the above objectives. Include information on:

- Activities and parameters to be monitored
- Methods of reporting progress
- Content, timing and distribution of progress reports
- Responsibilities (for providing/gathering information, approving and issuing reports)

Special requirements for information management and the means by which these are handled:

- Compatibility with every Partner's communications systems
- Communications with the Authorities and the public community

#### 4.9.5 KNOWLEDGE MANAGEMENT SYSTEM

A description of how the Project intends to identify, capture and transfer lessons learned originating within and outside the COMPANY.

#### 4.10 PROJECT CHANGE MANAGEMENT

- Categories of change and degree of effect on project objectives (e.g. cost and schedule objectives, etc.):
  - Project Change (e.g. emanating from PSA/JOA terms and conditions)
  - Design basis change
  - Design change
  - Scope change
  - Regulatory change
- Dependent upon category of change, process and authority level for managing change
  - Description of the appointed Project Change Control Board
  - Definition of the levels of project baseline for modification approval
  - Reference to variation proposals/orders, company instructions, work orders and procedures

#### 4.11 PLANNING AND CONTROLLING

##### 4.11.1 MANAGEMENT OF COSTS

- COMPANY and contractor methods, systems and procedures for cost management
- Development of Cost Estimates, including explanation of levels of accuracy
- Cost estimate report
- Development of Control Budget
- Cost Budget
- Authorisation for Expenditure (AFE) / Cash Call management
- Requirements for cost collecting and reporting relative to frequency, content and distribution
- Allocation of responsibilities for cost estimating, reporting and control between COMPANY and Contractors
  - Cost reporting
  - Earned value analysis
  - Commitments and forecasting
  - Cash calls
  - Trend control
  - Cashflow management
  - Feedback of cost data (continuous improvement)
- Management of special cost-related problems and uncertainties

##### 4.11.2 SCHEDULE MANAGEMENT

- COMPANY systems and procedures for controlling progress and schedule
- Allocation of schedule management responsibilities between COMPANY Project Team and contractors
  - Progress measurement & reporting
  - Earned value calculations
  - Schedule updating
  - Schedule integration - preparing and maintaining the "Project Master Schedule"
  - Resource scheduling and control

- Schedule coordination with Operations
- Schedule coordination with Drilling
  
- Influence of individual schedules for onshore/offshore/pipelines on overall schedule
- Management of special schedule-related problems and uncertainties
- Project Master Schedule
- Integrated Plan
- Project risking, and probabilistic milestone dates

#### 4.11.3 ACCOUNTING

- Organisation and responsibilities
- Accounting system and procedures

## 4.12 PROCUREMENT

### 4.12.1 CONTRACTING STRATEGY

- Describe and explain the proposed contracting strategy:
  - How has the overall work program been packaged, and why does this maximise value?
  - Which commercial risks will be carried by, or shared with, the contractors, and which will be carried entirely by the project owners?
  - Why is the most appropriate risk-sharing approach?
  - What controls are in place to manage these risks? (reference the Risk Register and/or Risk Management Plan)
- Outline the tendering and award strategy for major contracts.
  - What are the key constraints and how are we addressing them?
  - How can we minimise cycle time whilst meeting all our obligations and maintaining our business principles?
- Reference the Contracting Strategy document, Contracts & Procurement Plan and/or other detailed procedures.

### 4.12.2 PROCUREMENT PLAN

- Scope of work of each contract, status of pre-qualification activities and proposed award date
- Contract type to be adopted for each contract
- Reimbursement method for each contract
- Special terms and conditions
- Special procedures or considerations for pre-qualification of contractors.
- Outstanding decisions and how/when the decisions will be made
- Reference to contract administration procedures

### 4.12.3 PURCHASING STRATEGY AND PLAN

- COMPANY policies and host government requirements
- identification of what will be provided in-house and what will be purchased by others
- schedule
- reference to Project specific procedures

## 4.13 SUPPLY CHAIN

### 4.13.1 MATERIALS MANAGEMENT

- Description of the Materials Management Strategy, which should describe:
  - Impact of Contracting Strategy
  - External factors
  - Coding rules
  - Information Technology aspects
  - Impact on Project Organisation
  
- Materials Management Plan, which should describe how the Project will manage the following phases of the Material Management Process:
  - Specification of required materials
  - Support to purchasing of materials and equipment
  - Materials identification unique numbering system
  - Inspection, testing, expediting of the produced materials
  - Transportation of materials to their destination
  - Handling, installation and storage of materials on site
  - Provision of materials for operations and maintenance

### 4.13.2 LOGISTICS STRATEGY

The logistics management strategy should describe

- the Integrated Management Information System to be used for the consolidation, forwarding, transporting, routing and tracking of freight from source to destination
- existing infrastructure (office and warehouse facilities, transportation mode and route, including the main river and sea ports, berthing, width and draft limitations, airports, owners of the above)
- the need for upgraded/additional infrastructure
- materials logistics: dimensions, weight, and criticality of material to be transported, frequency of movement per project phase, including special provisions for out of gauge equipment and materials, methodology of movement, both from outside the project area, and locally within the project area
- personnel logistics: movement into and within the project area, frequency and numbers of personnel per project phase, modes of transport under normal and emergency evacuation situations
- the project organisation relative to logistics, including the role of a Project Management Services Contractor (if applicable) and key internal and external interfaces
- schedule of Customs, Permits and Consents
- Logistics constraints: climatic conditions, legislation etc.
- the role of local companies in the provision of logistics services

#### 4.14 DESIGN

- Allocation of design management responsibilities between COMPANY, Project Management Contractor (if applicable), engineering contractors, and all the suppliers:
  - Role of the PMSC (if applicable)
  - Design/technical approval requirements and authorities
  - Timing and plans for COMPANY design reviews
  - HAZOP and related design reviews
  - Value Engineering and Constructability Reviews
  - Integration of HSE management with design management
  - Third party verification of design
  
- Means by which special design-related challenges or difficulties will be handled
  - New technology
  - Use of proprietary COMPANY technology
  - Use of proprietary contractor technology
  - Performance of design contractors that the COMPANY may be using for the first time
  - Precedents set by existing facilities or JV partners.
  
- Design standards
  - COMPANY minimum standards
  - Local standards and practices
  - Generally Accepted industry standards and practices
  - Contractor standards and practices
  
- Policy on use of CAD or other automated design or management techniques
  
- Integration of Operations input into design

#### 4.15 DRILLING

- Interfaces between Facilities development and drilling projects
  - Technical interfaces
  - Site roles and responsibilities
  - Integration of (e.g.) logistics
  - Co-ordination of site activities
  - Schedule co-ordination
- Allocation of responsibilities between COMPANY Drilling Department and drilling contractors
  - Rig construction supply logistics (if applicable)
  - Construction supervision
  - Coordination of construction activities between drilling and facilities project areas
  - Controlling progress and performance
  - Drilling supervision
  - Drilling supply logistics
  - Safety management and Quality management
- Management of special drilling-related difficulties
  - Temporary facilities
  - Hostile environment
  - Performance of contractors that COMPANY may be using for the first time
  - Site access
  - Soil conditions
  - HSE issues
  - Emergency access / evacuation systems
  - Local labour requirements
- Assurance of adequacy of supply of labour, equipment and materials
  - Local sources
  - Union v non-union
  - Training requirements
  - Storage capacity, spill prevention plan

#### 4.16 CONSTRUCTION

- Allocation of responsibilities between COMPANY, Construction Management Contractor (if applicable), and construction contractors
  - Role of the CMC (if applicable)
  - Subcontracting strategy
  - Union relations
  - Construction supervision
  - Coordination of construction activities between onshore and offshore project areas
  - Controlling progress and performance
  - Coordination of COMPANY, contractor, vendors and module fabrication sub-contractors, delivery and erection
  - Integration of construction schedule with design and procurement
  - Safety management and Quality management
  - Preventive maintenance during construction
  
- Management of special construction issues
  - New design or construction technology
  - Temporary facilities
  - Hostile environment
  - Local construction regulations
  - Performance of contractors that COMPANY may be using for the first time
  - Site access
  - Soil conditions
  - HSE issues
  - Emergency access / evacuation systems
  - Local labour issues
  
- Assurance of adequacy of supply of construction labour, equipment and materials
  - Local sources
  - Union vs. non-union
  - Training requirements
  - Storage capacity, spill prevention plan

#### 4.17 COMMISSIONING AND START-UP

- Scope of work split between Construction (i.e. mechanical completion and pre-commissioning) and Commissioning and Start-up.
- Allocation of responsibilities between COMPANY and contractors during commissioning and start-up operations (including hand-over to Operations)
- Integration of timing, activities and requirements into the overall project plan to achieve “start-up driven scheduling”
- Co-ordination of planning between team, construction team and Operations
- Special start-up requirements to be reflected in project design or plans
  - Unusual need for operator training
  - New process or controls technology
  - Hazardous materials
  - Difficult or complex interface with Operations
  - Effluent monitoring and mitigation related to start-up
  - HSE issues associated with facility start up sequence
  
- Start-up sequencing to meet handover to Operations
- Interfaces for Handover to Operations
  - Loop checks
  - Safety walk-through
  - Punch list close-out for residual construction items
  
- Requirements for operator-based training
  - Operator training
  - Maintenance training
  - Start-up training
  - Emergency response training
  - Safety training
  - Strategy for development of Local operator workforce

#### 4.18 OPERATIONS AND MAINTENANCE

- Description of the General Operations philosophy relative to degree of automation, staffing levels, staff rotation, training, local content, contracting strategy, etc.
- Operations input into engineering design
- Transition planning for handover from Project to Operations
- Asset integrity plan
- Simultaneous Operations (SIMOPs) plans (if applicable)

#### 4.19 DECOMMISSIONING

- Obligations (e.g. from PSA) and COMPANY policy
- Decommissioning Strategy and outline plan

#### 4.20 INSURANCE

Description of how the project is going to transfer risk on third parties along the upcoming project phases.