

# **BROAD FRAMEWORK & KEY PARAMETERS OF FIELD DEVELOPMENT PLAN OF DSF AREA**



Directorate General of Hydrocarbons  
Ministry of Petroleum & Natural Gas, Government of India

# Work Programme Execution

- ❖ In the Model Revenue Sharing Contract (MRSC), the clock starts from the effective date i.e. the date on which PML is granted or transferred.
- ❖ The contractor has to complete the biddable work programme and to start commercial production from the existing discoveries within 3, 4, or 6 years depending on nature of discovery
- ❖ To accomplish this task, the contractor has to submit a Field Development Plan (FDP) within 6 months from the effective date.

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# Work Programme Execution

## Article 1.47

“Field Development Plan” or “FDP” means the comprehensive plan formulated by the contractor in relation to the development of a Discovery or a group of Discoveries or Fields as the case may be, in accordance with Article 10.



# FDP

## Article 10.5

**A FDP shall comprise of three distinct parts, namely:**

**Part A : Technical Assessment Report (“TAR”) for the commercial development of the Field/Contract Area**

**Part B : Provide the detailed work plan with timelines for commercial development of the Field/Contract Area**

**Part C : Comprise of the estimated costs and budgets for the commercial production from the Field/Contract Area**



# APPENDIX 'C'

## Part A (Technical Assessment Report)

1. Executive Summary
2. Description of Field / Contract Area
  - a) Field / Contract Area details
  - b) Licensee Information – Participating Interest (P.I.) Structure; Operator; Consortium partner
  - c) Extension history, if any
  - d) Critical RSC and other issue(s), if any
  - e) Relinquishment of area (if any)



# APPENDIX 'C'

## Part A (Technical Assessment Report)

### 3. Geological, Geophysical and Petro physical Analysis

- a) Exploration history in the Field / Contract Area
- b) Geology of the area
- c) Geological information about the Field / Contract area and its complexities
- d) G&G work carried out in the Field / Contract Area
- e) Petroleum System and Generalized Stratigraphy
- f) Discovery and its details
- g) Petrophysical Analysis
- h) Analysis and Interpretations
- i) Oil & Gas in Place as per PRMS
- j) Development Area with co-ordinates and technical justification

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# APPENDIX 'C'

## Part A (Technical Assessment Report)

### 4. Reservoir Analysis

- a) Testing details of Discovery, surface flow rates and well test interpretations
- b) PVT, Fluid data and Reservoir data
- c) Basis and validation of establishing “Sustainable Production Levels” as per RSC
- d) Development Strategy
- e) Reservoir Simulation Studies
- f) IOR / EOR Plan, if any
- g) Proposed Development locations with co-ordinates (tentative and for information only) map showing locations along with 1P & 2P inplace polygons
- h) Production profile under different variants along with recommended variants
- i) Reservoir Management Plan
- j) Action required in maximizing the ultimate recovery factor from the field / Contract Area



# APPENDIX 'C'

## Part A (Technical Assessment Report)

### 5. Development Concept and Production Facilities

- a) Development Options
- b) Flow Assurance, Chemistry & Water Injection / disposal
- c) Field / Contract Area Management Plan
- d) Pipelines network & details
- e) Delivery point with map
- f) Methodology for Measurement of Petroleum

### 6. Drilling and Well Completion

- a) Well Drilling Strategy
- b) Well Design and Well Completion (Production, injection, etc.)





# APPENDIX 'C'

## Part A (Technical Assessment Report)

7. Health, Safety & Environment

8. Oil & Gas Evacuation and Market Strategy

## Part B

Implementation schedule (timelines) for commercial development of the Field / including date of commencement of production

## Part C

Costs and budget estimates and Techno economic analysis

a) Estimated development and production expenditures

➤ CAPEX estimate

➤ OPEX estimate

b) Techno – economic analysis

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# Tasks and activities to be performed and reported in FDP

- Reservoir Characterization & Geological Modeling that lead to Volumetric Estimation.
- Reservoir Simulation & Performance Prediction
- Techno-Economic Evaluation of Prediction Scenarios
- **“To be implemented Scenario”** This scenario is the core of the project, and all other activities are planned to implement this scenario. This will cover the number & type of wells to be drilled.
- **Drilling & Completion Proposal**

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# Tasks and activities to be performed and reported in FDP

- Project Scope of Work & Execution Detail
- Project Cost Estimation
- Quality Management System
- Health, Safety and Environment
- Governing Standards – The International codes and standards for design and construction:
  - Engineering/ Construction
  - Environmental Codes and Standards
  - Drilling Standards
  - Symbols and Abbreviations



# **“To be implemented Scenario”**

- **Reservoir Development Strategy**
  - Natural Flow/ Artificial Lift (Primary Recovery)**
  - Water Flooding/ Pressure Maintenance (Secondary Recovery)**
  - Enhanced Oil Recovery (Tertiary)**
  - Well Construction: Conventional/ Maximizing the Reservoir Contact**
- **Field Production Profile (Oil, Gas & Water) & Schedule**
- **Estimation & Classification of Reserves as per PRMS**
- **Production System**



# Drilling & Completion Proposal

- Drilling & Completion are the main workload of the field development project
- They are the main carrier of the **“to be implemented Scenario”**

The Section should cover among other details:

- Typical/ Actual Wells Drilling Programs
- Completion/ Testing/ Suspension/ Abandonment Programs
- Well Drilling/ Completion Durations
- Contingent Cost Estimates



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THANKS