

## **Information and Management**

**Reference : EUP-E**

### **Who should attend**

- *Engineers*
- *Management and Financial Staff*
- *Who are willing to extend their understanding of method used in petroleum Project Management*

### **Instructor**

*Akil ZAIMI*

### **Duration**

*4 days*

### **Location**

*Monastir*

### **Language**

*English*

### **Fees/Trainee**

*1 400 DT*

## **Course Content**

### **1- PROJECT EVALUATION PRINCIPLES:**

Cash flows, principles of discounting, Net Present Values, Internal Rate of Return, Pay out Time, Capital Productivity Index

### **2- BUILDING A STRUCTURED MODEL FOR AN UPSTREAM PROJECT:**

Review of main inputs:

#### **a) Technical:**

Exploration work program cost estimating rules  
Recoverable reserves  
From recoverable reserves to production profiles : decline rates  
Development program cost estimating rules  
Abandonment

#### **b) Prices:**

Prices of products assumptions : oil , gas , Lpg, condensate prices  
Oil prices differentials, Futures swaps put options

#### **c) Fiscal terms:**

Concession type agreements, production sharing agreements : cost oil profit oil mechanism, service Contracts  
Principles of taxation and depreciation  
Workshop with individual computers: Model building with participants.  
How to structure the model and ease navigation  
Running scenarios  
Relevant graphs  
Discussion of outputs  
From single case to sensitivities: spider and tornado charts

### **3- TAKING INTO ACCOUNT RISK AND UNCERTAINTY**

#### **a) Discrete probabilities:**

Exploration risk, reserves cases: low medium high  
Building decision trees: Chance nodes, decision nodes, Expected Value concept  
Workshop with individual computers: introduction of exploration risk and reserves scenarios in the deterministic model

#### **b) Continuous probabilities:**

Random variables distribution, cumulative distribution,  
Application to reserves calculation formula: representing input uncertainties by distributions, Correlations between inputs. Type of distributions : uniform , triangular, lognormal... Interpreting distributions of reserves outputs P90, P50, P10, Expected reserves, standard deviation...Adding 2 distributions. Workshop with individual computers to run Monte Carlo simulations From Monte Carlo simulation of reserves to Monte Carlo simulation of NPV. Challenges to build such models  
Swanson's rule or other rules to go back from the distribution of reserves to discrete reserves

**NB : This training can be delivered in French Language**

**Akil ZAIMI**

Graduated Engineer from « Ecole Centrale de Paris », Engineering Economist From ENSPM, expert in evaluation, taxation and conduct of petroleum projects and Engineer at Medex Oil Paris.