Agenda:

15:00 - Doors open
15:15 - Welcome and introduction
15:30 - Presentation: An Integrated Approach to Performance Measurement by John Nelson
16:00 - Questions and closing comments
16:15 – IIRSM Update: IIRSM CEO Phillip Pearson
16:30 - Networking
16:45 - Close
Welcome & introduction

IIRSM CEO: Phillip Pearson
An integrated approach to performance measurement

John Nelson
Findings

Buncefield: Why did it happen?
The underlying causes of the explosion and fire at the Buncefield oil storage depot, Hemel Hempstead, Hertfordshire, 11 December 2005.

THE REPORT - THE BP U.S. REFINERIES INDEPENDENT INQUIRY

Key Issues:
- Safety Culture
- Regulatory Oversight
- Process Safety
- Human Factors

Final Report on the Investigation of the Macondo Well Blowout
Deepwater Horizon Study Group
March 1, 2011

Deepwater Horizon Accident Investigation Report
September 3, 2010

Deepwater Horizon Rig
Mississippi Canyon 201, Gulf of Mexico
April 20, 2010

U.S. Chemical Safety and Hazard Investigation Board
INVESTIGATION REPORT
EXECUTIVE SUMMARY
DRILLING RIG EXPLOSION AND FIRE AT THE MACONDO WELL
(11 Fatalities, 17 Injured, and Serious Environmental Damage)
MITIE Asset Management
Framework

Risk Management
• Anticipate, respond, recover and learn to reduce the missed opportunities and minimise risks.

Governance
• Providing the assurance to achieve our strategic objectives and achievement of agreed and acceptable outcome or results

Learning
• To deliver continual and sustainable improvements in all that we do

Risk Management
• Anticipate, respond, recover and learn to reduce the missed opportunities and minimise risks.
Project Lifecycle

New Opportunity
Authority to Perform Initial Development
Authority to Develop Bid
Authority to Submit Bid
Financial & Legal Close
Build Completion
Asset Acceptance
Asset Review Decision
Asset Disposed Of
Performance Measurement

KEY PERFORMANCE MEASURES
formal measure of achievement; allows MAM to track progress against recognised standard

LEADING & LAGGING INDICATORS
“hard data which may be analysed”

KEY OBJECTIVES
the “influencer”; accelerates or decelerates progress (achievement)
Established Excellence Models

Safety Culture Maturity Model
- GENERATIVE: Safety in how we do business, rooted here
- PROACTIVE: We work on the problems that we still find
- CALCULATIVE: We have systems in place to manage all hazards
- REACTIVE: Safety is important, we do it every time we have an accident
- PATHOLOGICAL: Who cares as long as we’re not caught

Increasingly informed
Increasing Trust

Risk Management Maturity Model
- Internal Environment
- Objective Setting
- Event Identification
- Risk Assessment
- Risk Response
- Control Activities
- Information & Communication
- Monitoring

BS EN ISO 9004;
Managing for the sustained success of an organization

Asset Management Excellence Model
- Learning
- Applying
- Embedding
- Integrating
- Optimising

Enablers
- Leadership
- People
- Processes, Products & Services

Results
- People Results
- Business Results

EFQM Excellence Model
- Compliance with BS 55
- Beyond BS 55 Compliance
- Limit known Asset Management Best Practice

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Partnership

The maturity scale has six maturity states as follows:

1. **Innocent**
   - The organisation is starting to learn about the importance of Asset Management activities.

2. **Aware**
   - The organisation is aware of the importance of the Asset Management Activities and has started to apply this knowledge.

3. **Developing**
   - The organisation is developing its Asset Management Activities and embedding them.

4. **Competent**
   - The organisation's Asset Management Activities are developed, embedded and are becoming effective.

5. **Effective**
   - The organisation's Asset Management Activities are fully effective and are being integrated throughout the business.

6. **Excellent**
   - The organisation's Asset Management Activities are fully integrated and are being continuously improved to deliver optimal whole life value.

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**AMCL Asset Management Excellence Model: Maturity Scale (AMEM)**
This diagram shows the Asset Management Maturity Scale.

In order to achieve the Excellence Model an organisation needs to be scoring above 70%.

The organisation is scoring just below 35%.

By addressing all the PAS 55 Major & Minor non-conformances (see next slide) the organisation will be moving closer to the Excellence model.

These actions were completed through the implementation of Project TOM.
Moving towards excellence

This diagram shows the score against each of the PAS 55 requirements (24).

In order to achieve the excellence model we needed to hit 70% on all subjects.

In order to see if we were moving towards the Excellence Model we looked at all Major & Minor non conformances.

The diagram also shows the PAS clauses that were being addressed via the implementation of Project TOM, therefore moving beyond both PAS 55 and closer to Excellence.

The 24 subjects in this model largely represent the 39 subjects in the AMEM.
Quality Management Approach

Continual improvement of the quality management system

Interested parties

Management responsibility

Resource management

Measurement, analysis, and improvement

Interested parties

Satisfaction

Product realization

Product

Input

Results of self-assessments

Self-assessment steps to achieve the following:
- Familiarisation with ISO 10014 maturity levels
- Completion of self-assessment questionnaires
- Preparation of Roadmaps
- Prioritisation of improvement opportunities

Continual Improvement Cycle

Plan

Check

Act

Output

Realisation of financial and economic benefits

ISO 10014: Guidelines for realizing financial and economic benefits

Table A.1 — Self-assessment of key elements — Correlation between key elements and maturity levels

<table>
<thead>
<tr>
<th>Key element</th>
<th>Maturity Level 1</th>
<th>Maturity Level 2</th>
<th>Maturity Level 3</th>
<th>Maturity Level 4</th>
<th>Maturity Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the management focus?</td>
<td>Focus on meeting requirements, with some consideration to changing expectations and opportunities.</td>
<td>Focus on meeting customer requirements, with some consideration to changing expectations and opportunities.</td>
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</tr>
<tr>
<td>What is the leadership approach?</td>
<td>Leadership is reactive, and is based on known solutions.</td>
<td>Leadership is proactive, and is focused on decision making or different strategies.</td>
<td>Leadership is proactive, and is focused on decision making or different strategies.</td>
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<tr>
<td>What is decided and what is important?</td>
<td>Decisions are based on the needs of the organisation and the market.</td>
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</tr>
<tr>
<td>Resources and processes</td>
<td>Resources are managed in a manner that is effective, efficient and predictable.</td>
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</tr>
<tr>
<td>How are the activities monitored?</td>
<td>Activities are monitored in a manner that is effective, efficient and predictable.</td>
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<td>Processes</td>
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</table>
Key Performance Measures

- Customer Focus
- Leadership
- Involvement Of People
- Process Approach
- System Approach to Management
- Continual Improvement
- Factual Approach to Decision Making
- Mutually Beneficial Supplier Relationship

Compliance with BSI PAS 55
Beyond PAS 55 Compliance
Limit of known Asset Management Best Practice

CHaSP! Corporate Health & Safety Performance Index (HSE)
Performance Measurement

KEY PERFORMANCE MEASURES
"Formal measure of achievement; allows MAM to track progress against recognised standard"

AMEM
Asset Management Excellence Model

CHaSPI
Corporate Health & Safety Performance Index

ISO 10014
Quality Management Guidelines for Realizing Financial & Economic Benefits

KEY OBJECTIVES
the “influencer”: accelerates or decelerates progress (achievement)

Stewardship & Governance
Risk Committee/AMSG established

People
Clear accountabilities and job description for all

Leadership
Visible engagement with staff

Culture
Measurement and analysis of feedback from employee surveys

Performance Improvement
Benchmark against peer group

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Appendix
To ensure that the appropriate performance measures were applied the following rules were observed:

1. Objective, easy to measure and collect;
2. Relevant to the organisation and groups whose performance is being measured;
3. Providing immediate and reliable indications of the level of performance;
4. Cost efficient in terms of the equipment, personnel and additional technology required to gather the information;
5. Understood and owned by those whose performance is being measured.
Thank you.

Any further questions?...........

John Nelson
Email: jcnelson@Hotmail.co.uk
Mobile: 07912 609357
Questions and closing comments
IIRSM Update:
IIRSM CEO Phillip Pearson
Networking