

# Offshore Oil and Gas Operations



## Principles and Practice Environment, Health and Safety Management



ICOE

International Centre for Oil and the Environment  
November 2014

### Mission

- ◆ Make a unique holistic contribution to the understanding of EHS (HSSEQ) principles and practice
- ◆ Integrate and share expert knowledge from industry, government & academia on Best Practices
- ◆ Provide enhanced solutions for risk management and cost optimisation

### Challenge

- ◆ Recruitment issues related to the 'Big Crew Change' and lack of investment and focus in the education & training supply chain
- ◆ Reducing levels of experience and technical competence across the industry
- ◆ Regulatory complexity, rising Capex and Opex, aging infrastructure and revenue uncertainties
- ◆ Predominance of a traditionally engineering-oriented decision-making structure

### Response

- ◆ Articulation of the underlying principles essential in day-to-day EHS (HSSEQ) operational practice in a comprehensive trans-disciplinary reference source in three volumes



Clair Ridge Artists Impression. Source: BP

“We draw on lessons learned from incidents and practice worldwide with particular focus on the forty years of offshore oil and gas operations in the North Sea and North East Atlantic.”

— ICOE Editorial Board



Piper Alpha in operation. Source: Occidental Petroleum (1976)



Piper Alpha accident. Source: Exponent (1988)

## Publication Sections

### VOLUME 1 Policy, Economics & Law

#### Section 1 EHS Principles & Practice

Editor: William J Cairns

Director, ICOE Research Limited

#### Section 2 Economic Impacts & Outlook

Editor: Prof. Alex G Kemp

University of Aberdeen

#### Section 3 EHS Legislation, Regulations & Global

### VOLUME 2 Environment, Field Operations & Decommissioning

#### Section 4 Ecosystem Impacts & Future Protection Measurements

Editor: Prof. Jon C Side

Heriot Watt University

#### Section 5 Technological Developments in Operations & Drilling

Editor: Prof. John Ford

Heriot Watt University

#### Section 6 Subsea Technology in Offshore Operations

Editor: Prof. Albert A Rodger (tbc)

### VOLUME 3 EHS Management

#### Section 8 Incidents, Causes, Effects & Imperatives

Editor: Prof. Colin J MacFarlane

University of Strathclyde & Glasgow

#### Section 9 Offshore Risk Management

Editor: Deborah Grubbe

President, Operations & Safety Solutions LLC

#### Section 10 EHS Best Practice in Corporate



Rt Hon Charles Hendry MP  
Minister of State for the  
Department of Energy and  
Climate Change

"I fully support this not-for-profit initiative by ICOE to bring the great understanding and experience of the industry into a foundational handbook for use by operators, regulators, and students. Spreading knowledge and good practice is a critical part of ensuring that the industry works safely and without harm to the environment."



Fergus Ewing MSP  
Minister for Energy,  
Enterprise and Tourism,  
Scottish Government

"I am glad to have the opportunity of supporting this most timely and ambitious project by ICOE, which seeks to harness the knowledge and experience built up by the industry following the Piper Alpha disaster in 1988. This is a handbook that is being created by the industry for the industry. I strongly encourage the continuing engagement with Oil and Gas UK."



Lord Cullen of Whitekirk  
KT Hon FREng FRSE  
Chairman, Piper Alpha  
Inquiry

"The distinctive challenge which has been taken up by the ICOE is, to bring together, assess and organise information as to best practice from a considerable number of disparate sources, along with a statement of general principles, for the benefit of health, safety and the environment. This is a significant initiative, especially in times when the industry is faced with operating in extreme conditions and dealing with maturing fields and ageing installations. The activities of operators and regulators, and the training of much-needed personnel will stand to gain from the provision by the ICOE of comprehensive and up to date information on best practice."

## The ICOE Project Team

ICOE team comprises ten section editors and fifty authors, each with distinguished industry and academic credentials. They are supported by a research and production team administered by ICOE management.

## Sponsorship

ICOE sponsorship is ongoing and welcomes both new donors and investors. Sponsors are offered the opportunity to support and contribute to the production of this important trans-disciplinary reference at the leading edge of EHS Best Practice. Sponsors will be given attributed recognition in this unique collaborative effort.

This work is being published both digitally and in hard copy. The contents will be subject to periodic updating online.

## Current Sponsors



## Contact

### Project Management Team

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