Safety and Operational Risk Update

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Progress in safety and risk management

- Acting on lessons from the Gulf of Mexico oil spill

- Investment in integrity and capability

- Divisional and Functional model in Upstream

- Risk management

- S&OR organization
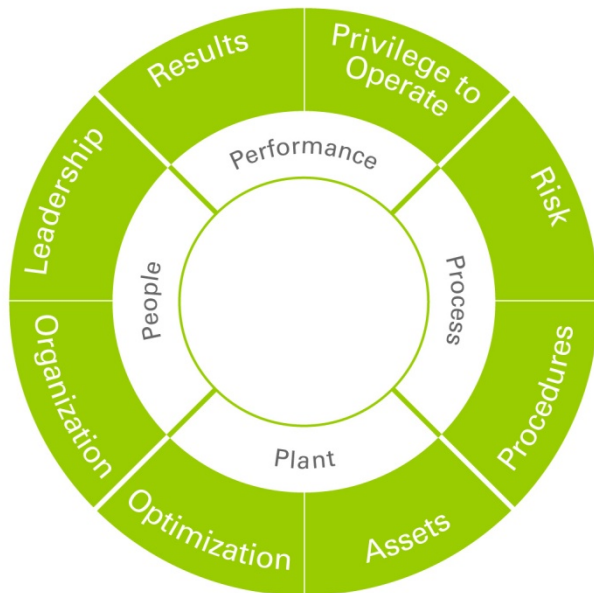
Embedding S&OR – highlights since May

- **Building safety and operational risk (S&OR) capability**
  - 175+ individuals recruited to date, with 160 in active recruitment
  - 65 – 70% of projected recruitment is external – from the oil and gas industry and beyond
- **S&OR authorities and independent view are contributing to:**
  - More **comprehensive and assured** risk action plans for each operational unit
  - More **incisive interventions** on emerging risk situations
  - Improved **investigations and learning** from all significant incidents
  - Enhanced **competency assurance** of critical roles in safety and operational risk
  - **Conformance with requirements** through:
    - increased audit scope
    - real-time advice and guidance
    - S&OR intervention rights
- **Group safety and operations risk management strategic frame confirmed**
  - Identifies key enduring objectives
  - Multi-year agenda sets the priorities for operating entities
  - Informed by learning and recent progress

BP's safety and operational risk management strategic frame

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Enduring Principles

Deep capability & a safe operating culture across all levels of BP

Results · Privilege to Operate · Performance · Leadership · Risk · People · Process · Organization · Plant · Procedures · Optimization · Assets

OMS is the way BP operates

Self & independent assurance confirms conduct of operating

Focus Areas

Leadership
operating leaders & culture

Organization
competence & contractors

Risk
assessment & management

Systematic operating

Results
checks & balances

Leadership, operating leaders & culture

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Our enduring objective

That BP's operating culture continuously creates an environment of safe, compliant and reliable operations

What we are building on

- Clear and pervasive tone from the top on priority

- Reinforcing actions:

  - S&OR organization and authorities

  - Initial intervention on reward and performance objective setting with emphasis on safety contribution from every employee

2011/12 activities

- Fundamental refresh of corporate values, re-emphasizes safety as the highest value

- Revised performance and reward mechanism reinforcing values

- Defining expectations of operations leaders expressed in personal performance objectives

- Leveraging existing capability programs to reinforce leaders role in embedding values and safety culture

- Structured leadership field engagements, where leaders observe, inspect and correct

Organization, competence & contractors

Our enduring objective

That critical roles are staffed with competent people and contractor activities are being managed safely

What we are building on

- Existing competency requirements and programs
- Increased breadth of roles defined as safety and operational risk (SOR) critical
- S&OR independent endorsement of SOR critical line appointments
- Competency assessments of priority SOR critical roles commenced
- Existing OMS requirements and process for contractor management

2011/12 activities

- Accelerating assessment of prioritized SOR critical roles
- Implementing mandatory competency assurance requirements
- Implementing mandatory contractor management requirements
- Targeted enhancement of management and assurance plans for potential high consequence contractor activities

Risk assessment and management

Our enduring objective

That BP businesses comprehensively understand their safety and operational risks and are continually in action to control or eliminate them

What we are building on

- Suite of mandatory practices for management of operational risks
- Enhanced annual process for management of operational risks
    - Implementation of group practice on assessment and prioritization
    - Greater visibility and stronger governance
    - Independent S&OR scrutiny
- S&OR's independent expertise in advising on emerging operational risks

2011/12 activities

- Enhancing 2012 annual risk process by applying 2011 learning
- Review and strengthen as appropriate BP's framework for participation in new & existing non-operated joint ventures

Systematic operating

Our enduring objective

That systematic management and continuous improvement is evident across BP, using our OMS to drive safe, compliant and reliable operations

What we are building on

- All BP's operating businesses transitioned onto OMS

- Maturing OMS self-assessment process

- Independent S&OR review of business OMS performance improvement plan

- S&OR audits to requirements outlined in OMS

- Existing framework for managing mandatory requirements

- Existing practice for investigations, action tracking and closure
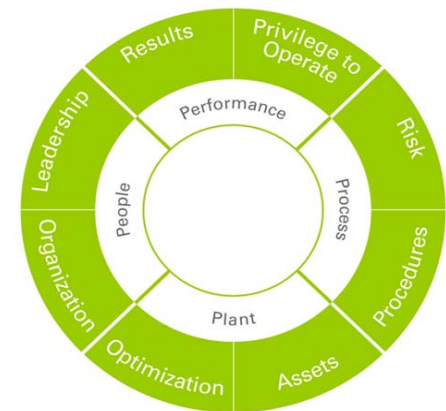
2011/12 activities

- Acceleration of OMS conformance across the group through:
  - Prioritized targeting of OMS sub-elements
  - Increasing focus on measurement of operating outcomes to confirm implementation effectiveness
  - Application of practical expertise to selected sites - reinforcing "how to"
  - Replication of good practice across operations
- Strengthening oversight and governance of requirements
- Strengthening Investigations and group-wide learning

Results, checks and balances

Our enduring objective

That self verification and independent assurance confirm BP's conduct of operating

What we are building on

- Multiple layers of checks and balances, including:
  - o Operations (and Projects) line management self-verification
  - o Independent S&OR-deployed assurance and audit
  - o Group internal audit
  - o Executive Team and the Board
- Enhanced operational risk insights through S&OR deployed assurance
- Expanded S&OR audit scope includes rig audit and "Bly action" verification
- Performance indicators actively used, monitored and continuously improved
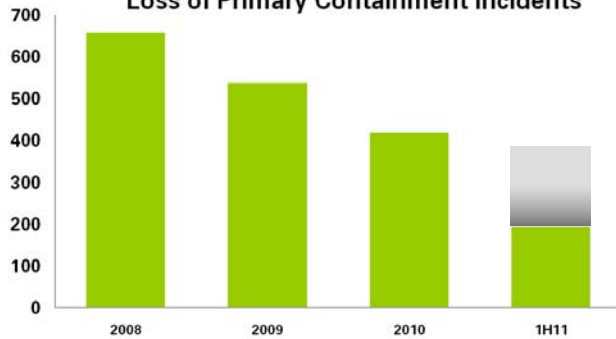
Activities 2011/12

- Maturing deployed S&OR assurance processes to drive operating discipline
- Expanding S&OR audit scope to include major projects and third-party terminals
- Utilizing deepened insights to drive operational performance and systemic improvements
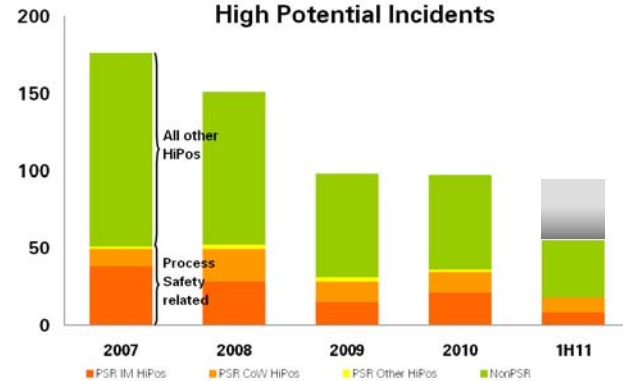
Performance indicators
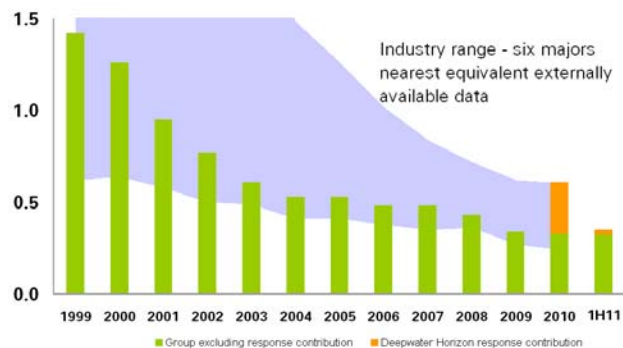

Loss of Primary Containment Incidents
(bar chart: 2008, 2009, 2010, 1H11)

High Potential Incidents
(bar chart: 2007, 2008, 2009, 2010, 1H11)
Legend: PSR IM HiPos, PSR CoW HiPos, PSR Other HiPos, NonPSR
All other HiPos
Process Safety related

Recordable Incident Frequency
(bar chart: 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 1H11)
Industry range - six majors nearest equivalent externally available data
Legend: Group excluding response contribution, Deepwater Horizon response contribution

- LOPC
  - o Measures uncontrolled release of hydrocarbons/hazardous materials

- HiPo
  - o Internal metric
  - o Encourages proactive reporting of incidents with potential high consequence
  - o Allows insights into failure mechanisms linked to process and personal safety controls

- RIF
  - o Established industry personal safety metric
  - o Ability to gauge performance and share best practices

Note: 2011 LOPC & HiPo data represents 1H statistics