



Safety Case in Drilling

SPE Gulf Coast Section

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Overview



- **Why implement a Health, Safety and Environment (HSE) Case**
- **What is required for effectiveness**
- **How is a HSE Case developed**
- **Challenges to implementing the HSE Case for deepwater drilling operations**
- **Recommendations to BOEM**

Macondo – HSE Case



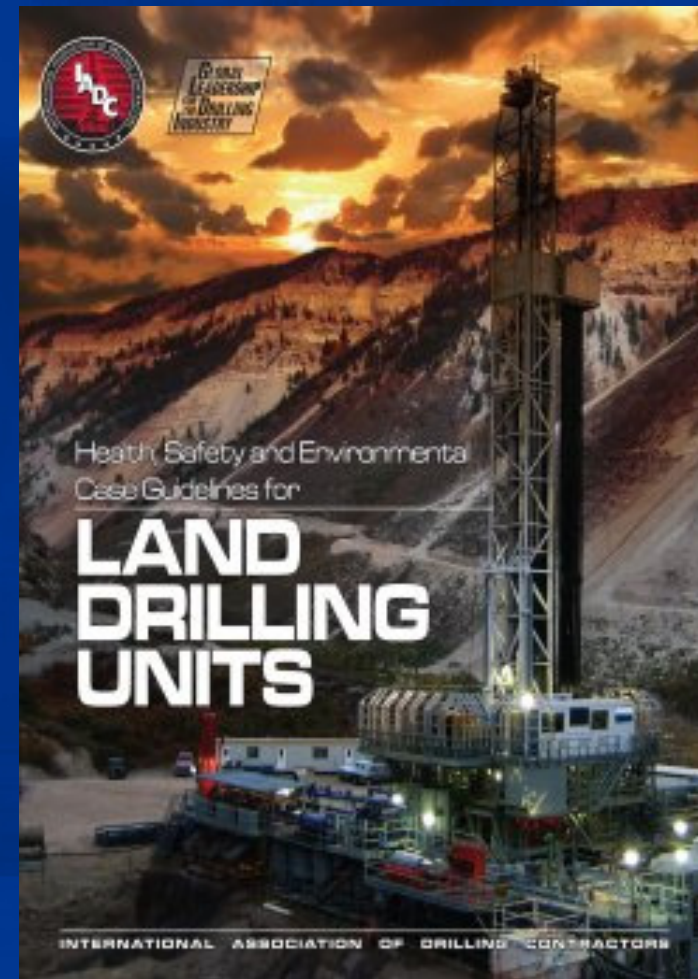
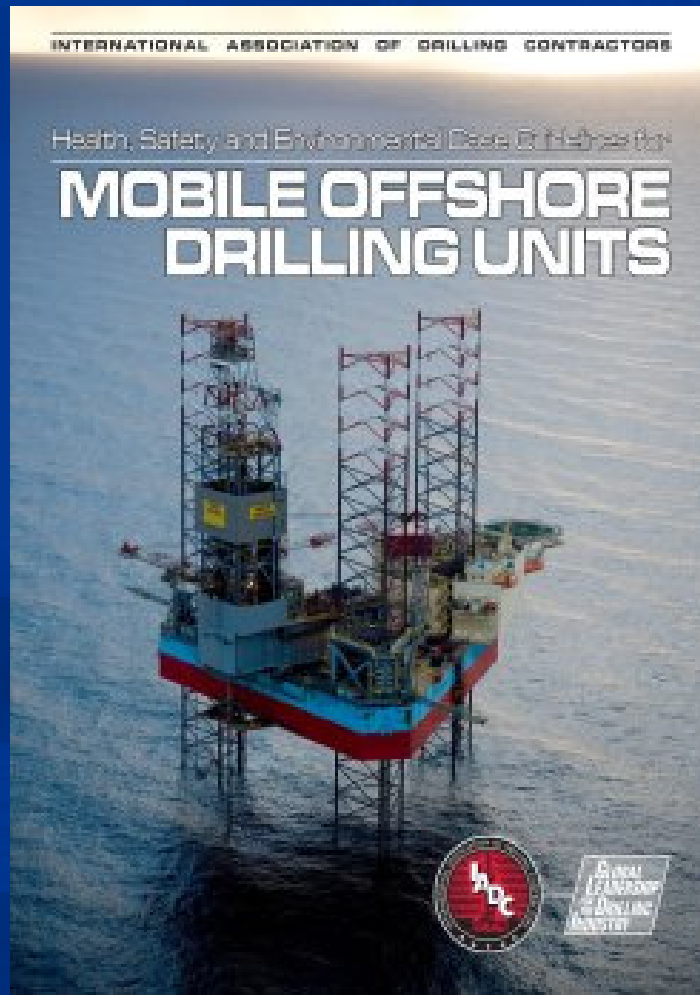
- **Joint Industry Task Force recommended adoption of IADC HSE Case Guidelines and Well Construction Interfacing Document (WCID) for deepwater drilling**
- **Secretary of Interior adopted these recommendations in 27 May report to the President**
- **JITF has developed Guidelines & will conduct workshops for preparing the Well Construction Interfacing Document**

IADC HSE Case Guidelines



- **Nearly 20 years of development**
- **Accepted by Regulators and Operators in numerous regions**
- **Given award by International Regulatory Forum**
- **Specific Legislative Annexes**
- **Offshore and Land Versions**

IADC HSE Case Guidelines



Basics of an HSE Case



- **Internal identification of hazards and establishment of risk-management controls to meet HSE objectives**
- **Documentation of process used to meet an organization's HSE objectives**
- **Documentation of process used to meet HSE objectives that may be defined by a regulator**

What is required for effectiveness?



- **Robust and effective management system**
- **Ongoing commitment to the process**
- **A clear understanding, established through dialog, of the client's and regulator's expectations**

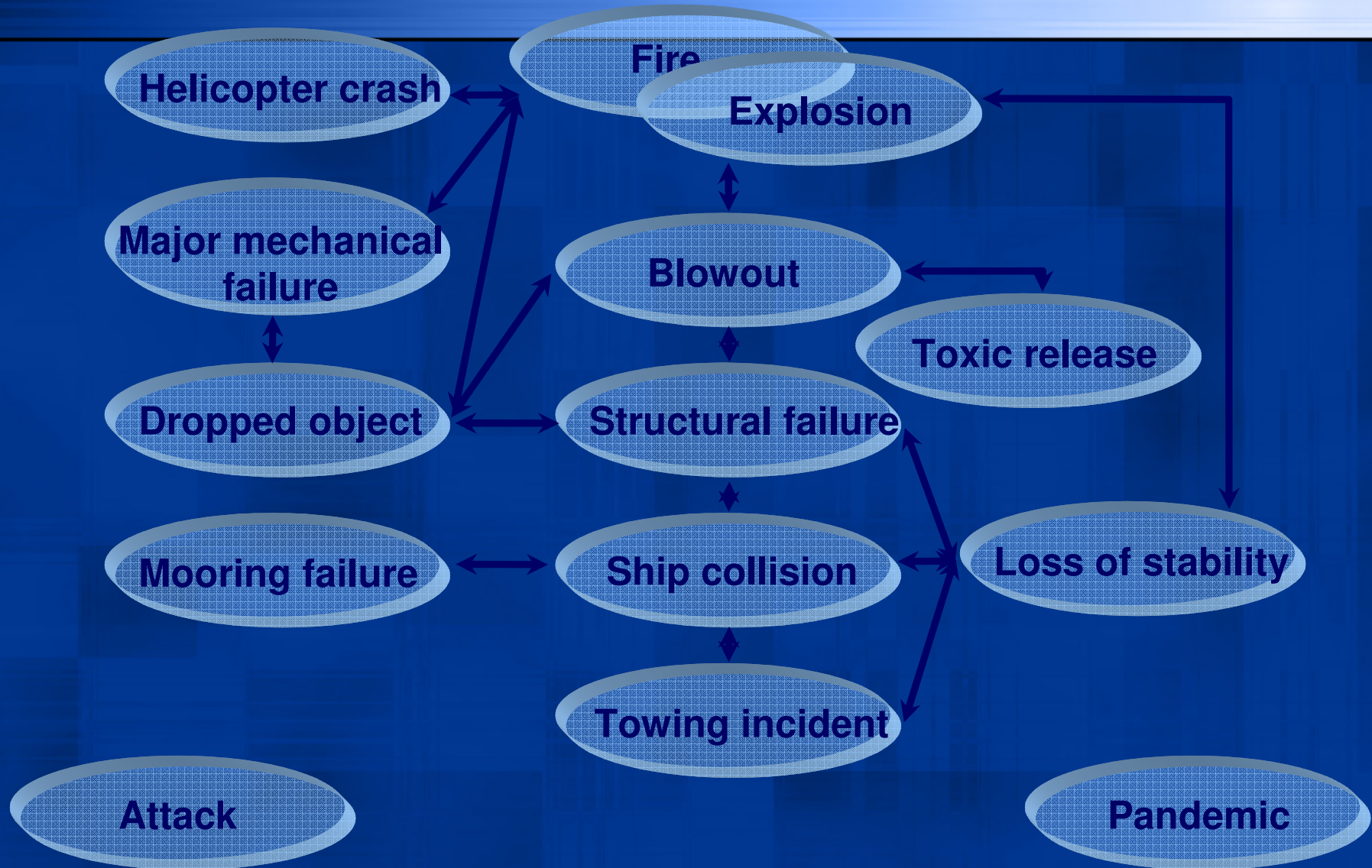
Development of an HSE Case



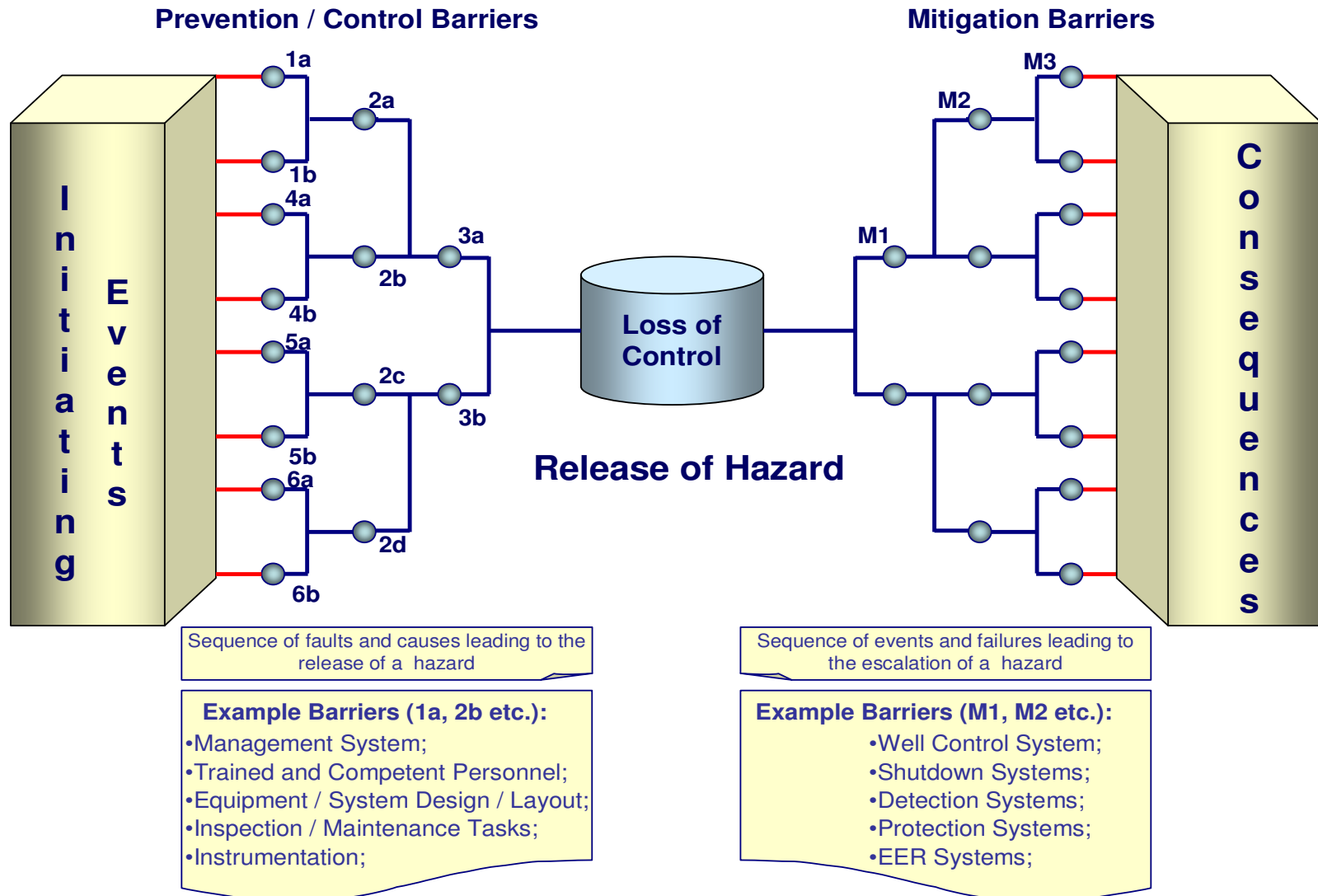
Three major elements in the process

- Identification of the major hazards and events
- Identification and assessment of the risk-control measures to prevent or mitigate those hazards
- Integration into design and operations

Major hazards and events



Assessment and integration



Assessment and integration



- **Identification of responsibilities for maintaining barriers**
- **Identification of operational boundaries**
- **Integration into operational procedures**
- **Communication to the workforce**
- **Feedback – workforce, client and regulator(s)**

Well Construction Interfacing Document

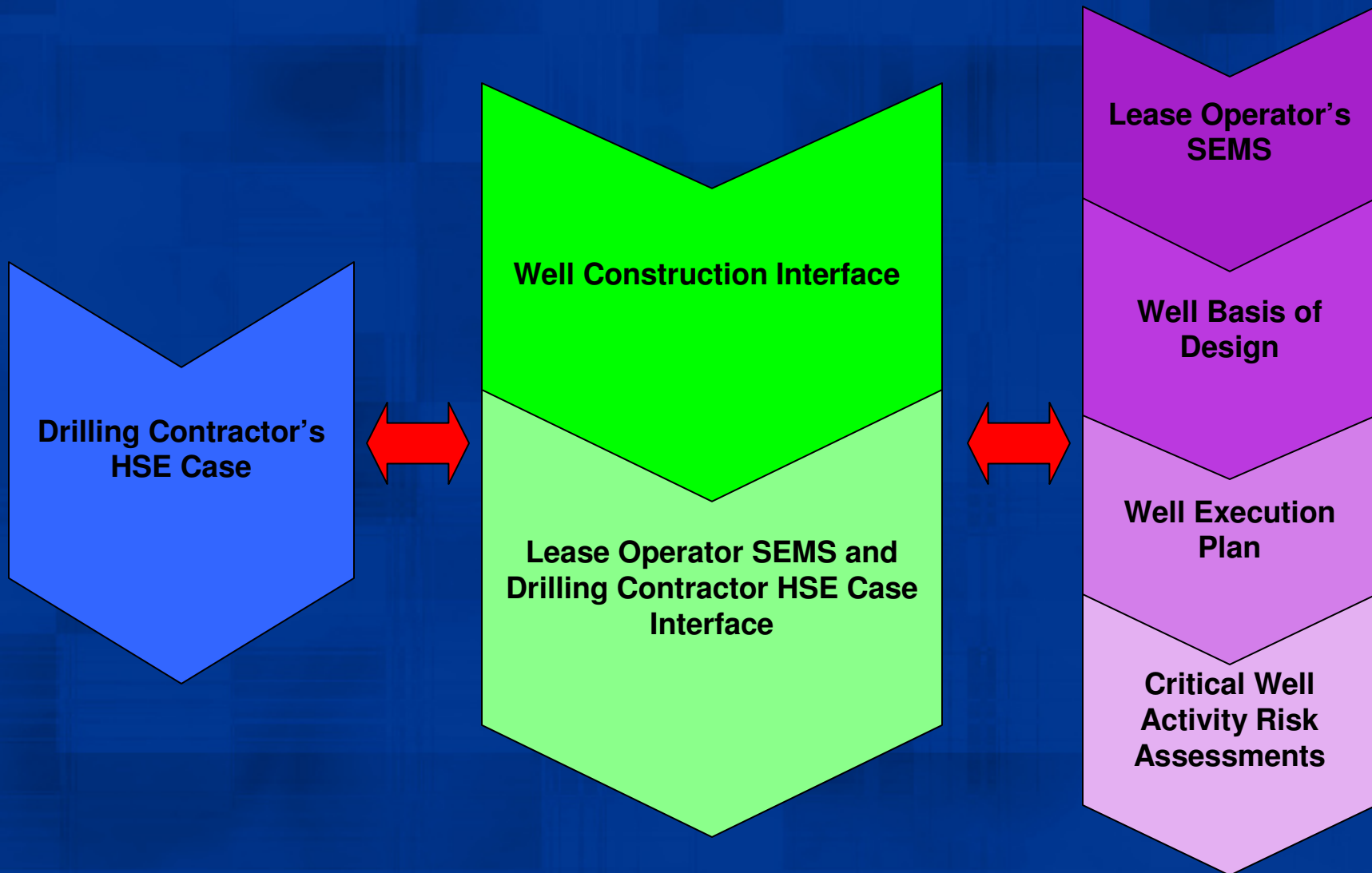


- **Traditional bridging of the Drilling Contractor and Lease Operator safety management systems**

PLUS

- **Well Basis of Design**
- **Well Execution Plan**
- **Critical well activity risk assessments**

Well Construction Interfacing Document



The challenges



- **Translating overseas HSE Case experience to the United States**
- **Developing mutual understanding of Well Construction Interface Document (WCID)**
- **Dialog with BOEM to establish mutual understanding of goals**
- **BOEM resource constraints**
- **Addressing jurisdictional issues with other regulators, particularly the U.S. Coast Guard**

Recommendations to BOEM



- **Assess agency resources in developing approach to implementation of an HSE Case**
- **Establish a means for ongoing dialog with industry**
- **Establish a multi-year implementation roadmap that recognizes the complexity of the task**

Conclusion



IADC is committed to:

- **Assisting drilling contractors to implement the HSE Case in the United States**
- **Sustaining dialog with oil companies to facilitate HSE Case implementation**
- **Engaging DOI/BOEM to facilitate mutual understanding of HSE Case expectations**

Global Leadership for the Drilling Industry



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