Outline

- Objective
- Background on JIP
- Drivers and Rationale
- Planned Projects
- JIP Organization
- Current Status
- Next Steps
JIP Objectives

- Create an international research program to further enhance industry knowledge and capabilities in the area of Arctic oil spill response

- Raise awareness of existing industry OSR capabilities in the Arctic region

- As a separate effort, a publication “Oil Spill Response in Arctic and Cold Climate Conditions” – in Progress (API/IPIECA/OGP)
Background on JIP

- Increased focus on oil exploration in Arctic and sub-Arctic regions
- Greater scrutiny of operations post Timor Sea and Gulf of Mexico spills
- Unique aspects of Arctic exploration present different challenges for environmental protection
Background on JIP

- Last few decades have seen significant advances in Arctic spill prevention and response technology

- Example Oil Spill research projects:
  - SINTEF Oil in Ice JIP
  - OHMSETT Dispersant work
  - Spill Detection/Monitoring trials

- Need to continue work
Background on JIP

- **2009**: Joint Committee of IPIECA and API formed
- **Mandate**: review work on spills in ice; identify advances; research needs; prioritize issues
- **Result**: recommendation to establish a JIP to undertake various research projects
- **Managed under Association of Oil and Gas Producers (OGP)**
Drivers for a JIP format

- Environmental protection is a non-competitive area
- Limited opportunities to test equipment and conduct large scale field experiments
- Most efficient use of resources (funding & expertise) using a common strategy / working together
- Provides an opportunity for government and research organizations to join, ensuring transparency of the process and results
- Demonstrates unified industry commitment to responsible Arctic exploration and respect for the needs of local communities
Drivers for a JIP format

- Promotes credibility via group consensus and industry collaboration to assure Arctic stakeholders
- Provides a body of information that can be used to respond proactively to groups whose aim is to prevent oil and gas development in the Arctic
- Makes it easier for national administrations and intergovernmental organizations to participate in the studies and build their confidence in the results of the research
- Without a JIP which demonstrates industry’s commitment to safe Arctic operations, the current ‘unfavorable licensing climate’ may be extended
Planned JIP Projects

DISPERSANTS:

1. Fate of dispersed oil under dynamic drift and pack ice

2. Dispersant testing under realistic field conditions
Planned JIP Projects

ENVIRONMENT/EFFECTS:

3. Environmental Impacts of Arctic Spills and Their Response
Planned JIP Projects

MODELLING/MONITORING:

4. Trajectory Modeling in Ice

5. Oil Spill Detection and Monitoring in low visibility and ice
Planned JIP Projects

MECHANICAL RECOVERY:

6. Mechanical Recovery in ice infested waters
Planned JIP Projects

IN-SITU BURNING (ISB):

7. State of Knowledge

8. Aerial Ignition systems

9. Herders to expand ISB window
Planned JIP Projects

EXPERIMENTAL SPILLS:

10. Field Experiments Testing Different Technologies
Arctic Oil Spill Response Technology: Joint Industry Programme Organization

Executive Committee
Peter Velez – Current Chair

Programme Manager
Peter Devenis

Made of 1 representative (& alternate) from each member company

Programme Authority
Accountability
Financial Approval

Project Coordination &
Management / Contractor Liaison

Note: The Project Leads together with the Programme Manager would make up an informal committee to share information, project progress and mutual resources and opportunities

Communications Committee
Communication, Outreach and Information Support to JIP

Dispersants Working Group

Project 1: Fate of dispersed oil under broken ice
Project 2: Dispersant testing in drift & pack ice

Environment/Effects Working Group

Project 3: Environmental Impacts of Arctic spills and their Response

Modelling/Monitoring Working Group

Project 4: Trajectory Modelling in Ice
Project 5: Oil spill detection and monitoring in low visibility & ice

Mechanical Recovery Working Group

Project 6: Mechanical Recovery in ice infested waters

In-Situ Burning Working Group

Project 7: State of Knowledge ISB Arctic/Ice
Project 8: Aerial Ignition capability
Project 9: Herders for In Situ Burning

Experimental Spills

Demonstrations
Trials
Meso-Scale Tests
Field Tests

Technical Direction, Expertise and Review: Each Working Group has a Project Lead and representatives focused on providing technical guidance and review
Current Status

- Participation Agreement circulated to companies for signature
- Deadline of May 13
- 4 year programme 2011-2014
Next Steps

- Formally initiate JIP at International Oil Spill Conference in Portland (May 25, 2011)
- Continue to raise awareness about JIP among companies and governments with interests in Arctic and cold climate areas
- Solicit their participation in the JIP
- Liaise with other R&D initiatives to avoid duplication; encourage synergies
- Solicit expressions of interest; identify contractors; target to issue RFP’s in 2011