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# Integrated Safety Management System Safety Culture Improvement Initiative

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# ISMS Core Functions and Guiding Principles

## **5 Core Functions**

- Define the Scope of Work
- Identify the Hazards
- Develop and Implement Hazard Controls
- Perform Work Within Controls
- Provide Feedback and Continuous Improvement

## **7 Guiding Principles**

- Line Management Responsibility for Safety
- Clear Roles and Responsibilities
- Competence Commensurate with Responsibilities
- Balanced Priorities
- Identification of Safety Standards and Requirements
- Hazard Controls Tailored to Work Being Performed
- Operations Authorization

# EFCOG/DOE Safety Culture Initiative

- Senior Energy Facility Contractors Group (EFCOG) and Department of Energy (DOE) sponsorship
- Safety culture is DOE and contractor priority
- High visibility task team was created to address issue
- Approximate 12 month effort to establish path forward
- Considered various culture programs such as INPO, NRC, IAEA, HPI, HRO, VPP
- Tools based on assessments and need of organization
- One year elective use of products in 2009
- Final recommendation in early 2010
- [http://efcog.org/wg/ism\\_sctt/index.htm](http://efcog.org/wg/ism_sctt/index.htm)

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# Task Team Membership

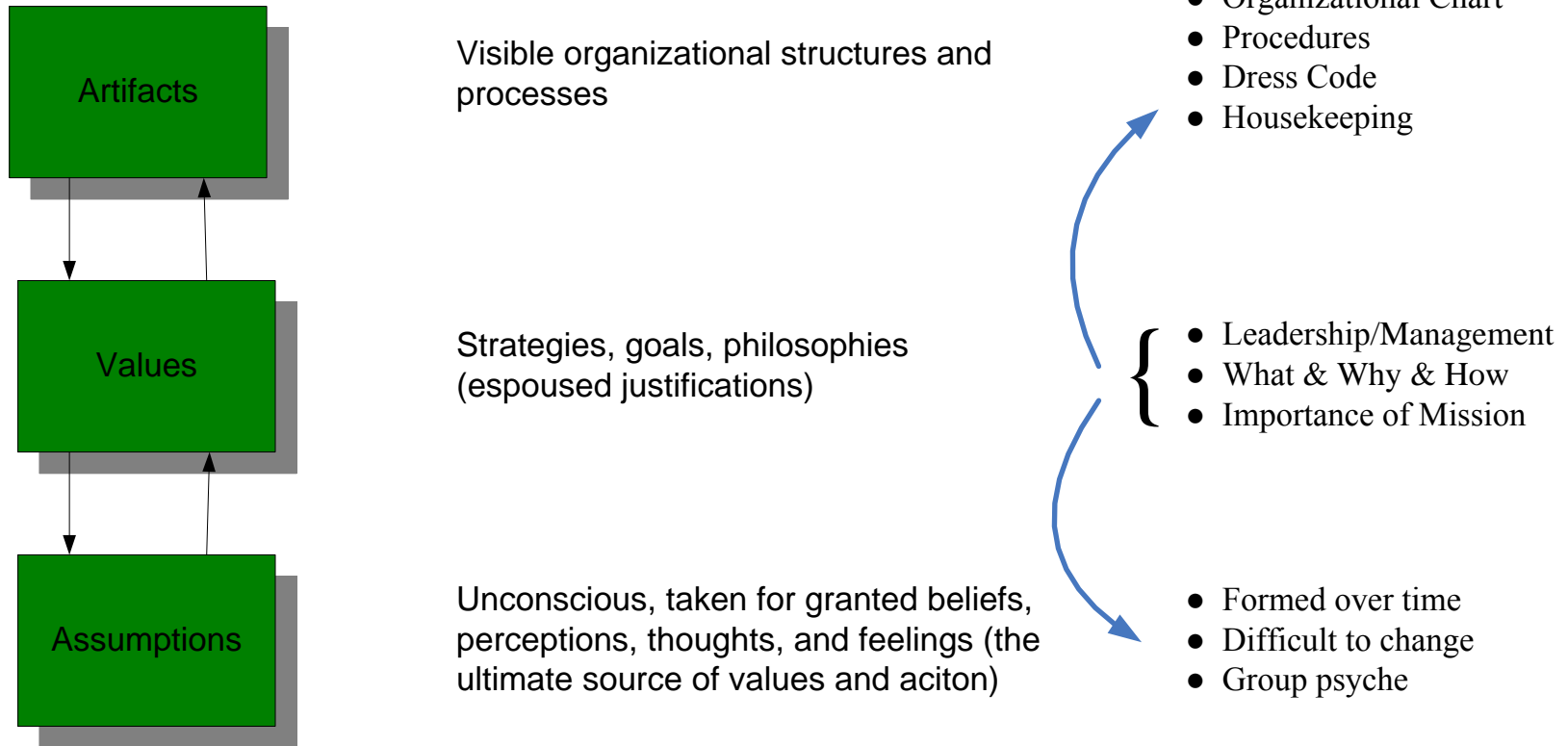
- Senior prime contractor representatives
- Senior DOE representatives
- DOE and contractor co-chairs
- External participants such as DNFSB, INPO, and NASA
- Support personnel

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# Task Team Safety Culture Definition

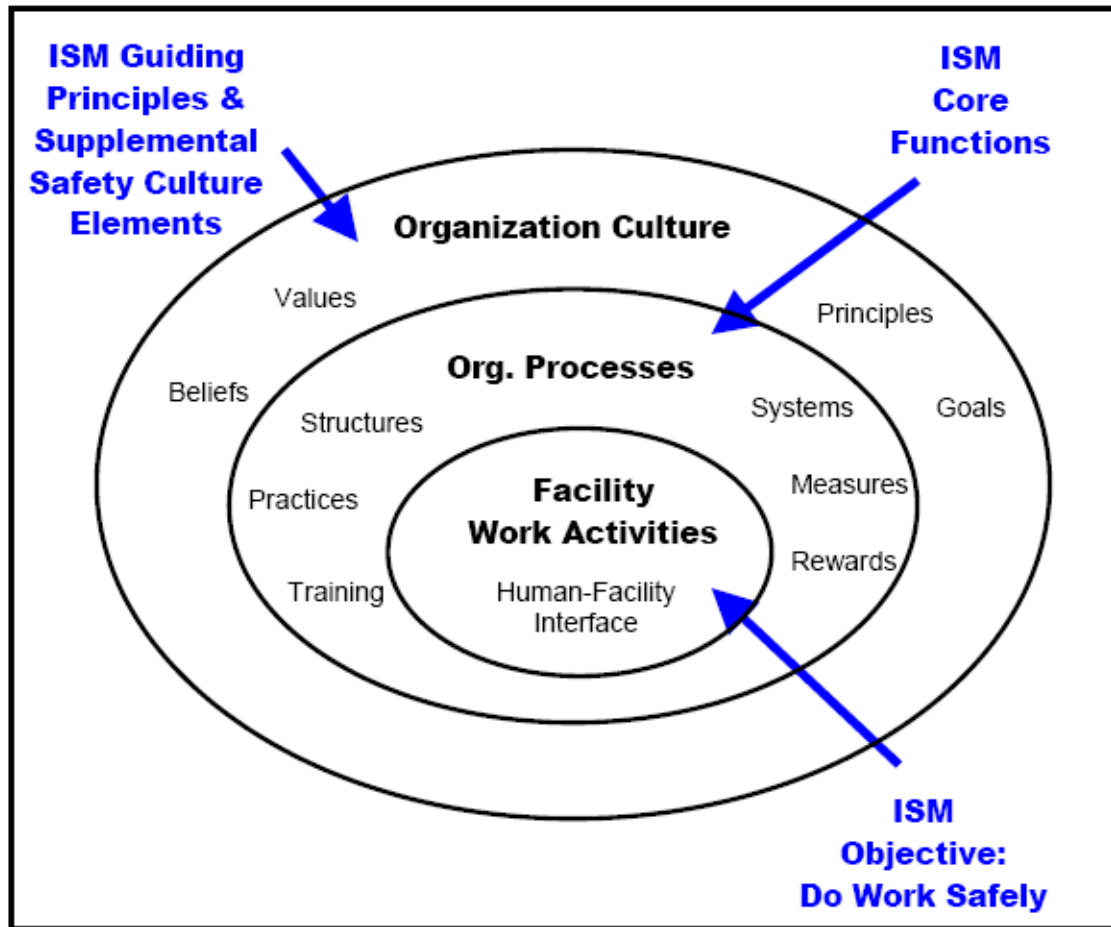
A safety culture is an organization's values and behaviors, modeled by its leaders, and internalized by its members, that serve to make safe performance of work the overriding priority to protect the workers, public, and the environment.

# What is Culture?

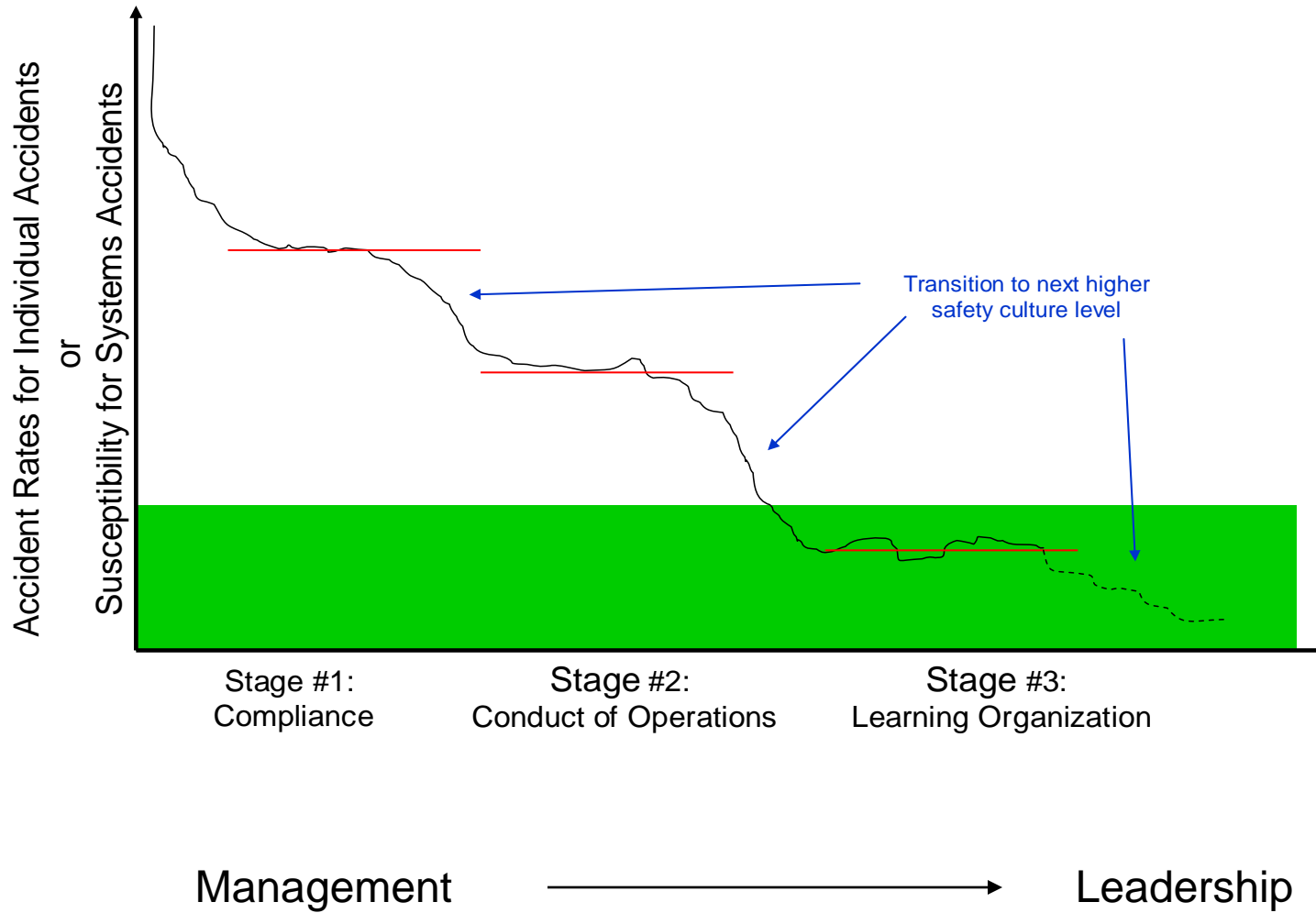


Schein's organizational model

# Safety Culture and ISMS



# Improvements in Safety for Each Stage of Safety Culture Maturity



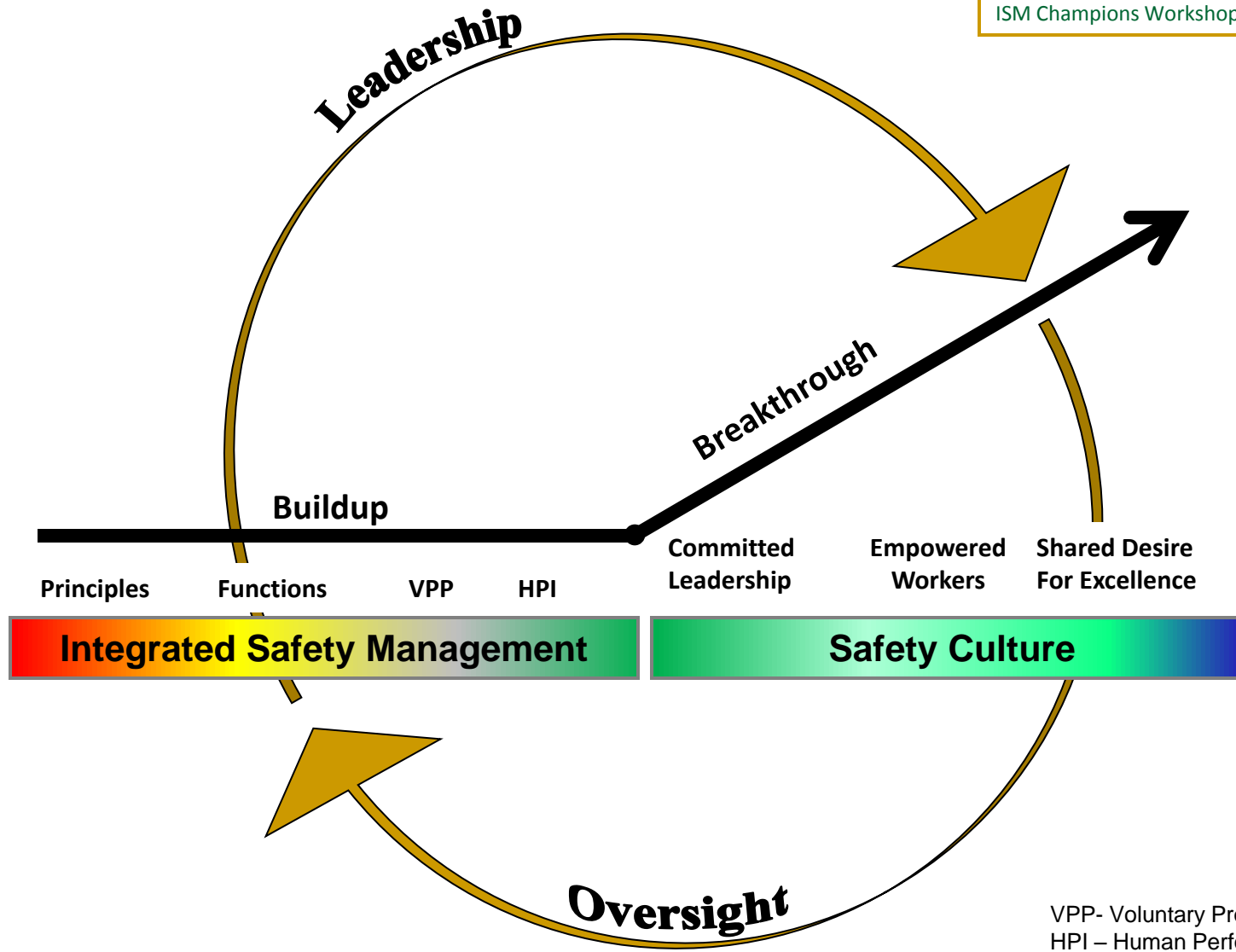
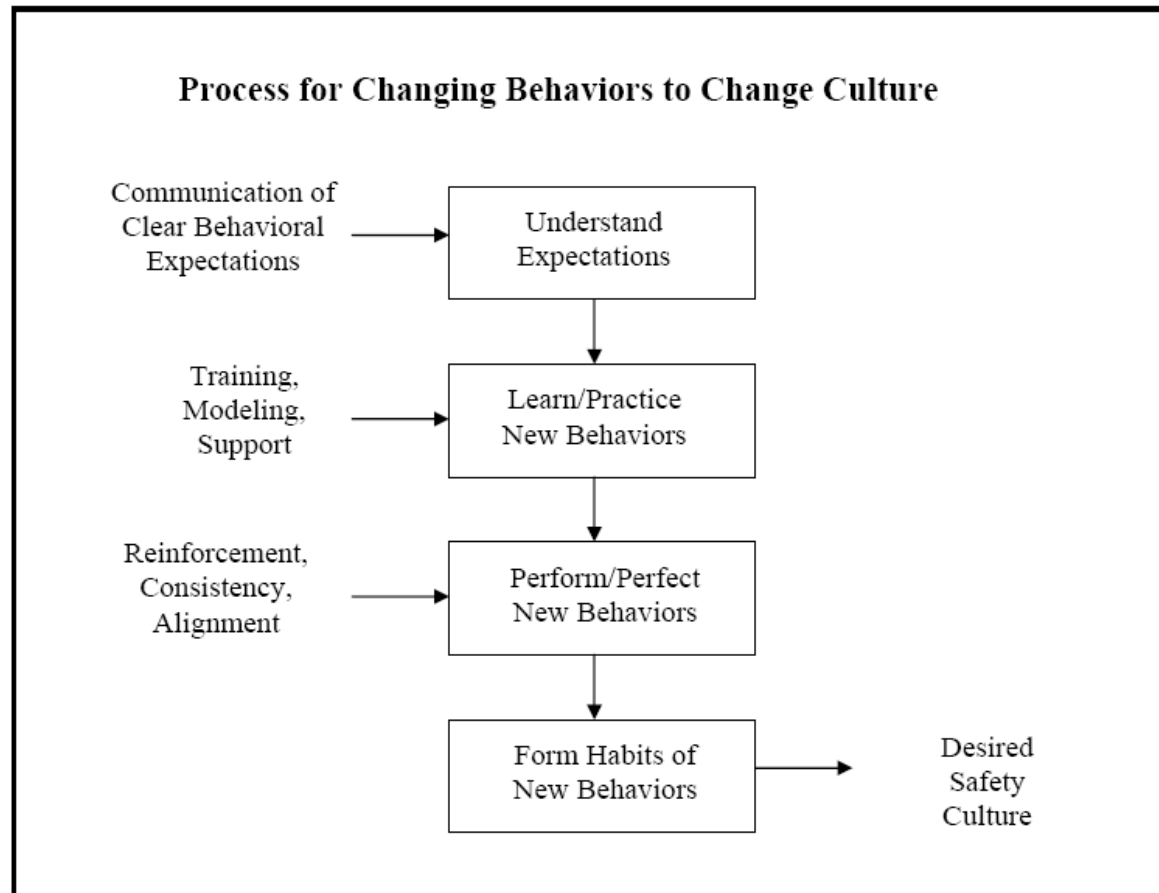


Figure adopted from: Jim Collins, Good to Great; HarperCollins Publishers, NY; 2001.

# Changing Behavior to Change Culture



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# Leadership

- Clear expectations and accountability
- Management engagement and time in field
- Risk informed, conservative decision making
- Open communication and fostering an environment free from retribution
- Demonstrated safety leadership
- Staff recruitment, selection, retention, & development

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# Employee/Worker Engagement

- Personal commitment to everyone's safety
- Teamwork and mutual respect
- Participation in work planning and improvement
- Mindful of hazards and controls

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# Organizational Learning

- Performance monitoring through multiple means
- Use of operational experience
- Trust
- Questioning attitude
- Reporting errors and problems
- Effective resolution of reported problems

# Culture Assessment Considerations

- **Task Team Attributes/ISMS Attributes Crosswalk**
- **Initial Assessment Considerations**
  - Multiple methods to triangulate on issues
- **Culture Survey Considerations**
- **Interviews**
- **Document Review**
- **Performance Indicators**
- **Culture Assessment Lessons Learned**
- **Post Assessment Considerations**
  - Prioritize issues and response

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# Tools to Improve Safety Culture

- **Senior Management Commitment**
- **Expectations Identified and Communicated**
- **ISMS Training**
- **Line Management Time in the Field**
- **Coaching and Mentoring**
- **Behavior Change**
- **Voluntary Protection Program (VPP)**
- **Six Sigma Learning Tools**
- **Problem Identification Process**
- **Human Performance Improvement (HPI)**
- **Human Resource Processes**

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# Pilot Facilities

- Argonne National Laboratory
  - B & W Pantex
  - Oak Ridge Trans-Uranic Waste Processing Center
  - Pacific Northwest National Laboratory
  - Washington River Protection Solutions, LLC
  - Washington Closure Hanford
  - Idaho National Laboratory
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# Summary of Pilot Experiences

- Culture change starts at the top
  - This is a long journey, but high payback
  - There is need to share lessons learned
  - Difficult to write an exact cookbook
  - Employee and management engagement is critical
  - Pilots used to reach breakout performance
  - Build culture activities into existing processes
  - Don't regulate culture
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# Summary and Path Forward

- Close Task - Generate final task team report
  - Provide input for next ISMS declaration to DOE
  - EFCOG and EM/DOE endorsement letters to contractors endorsing the pilot and products of the task team
  - Plan and charter for a new EFCOG ISMS/QA Safety Culture Subgroup
  - Develop Communication Plan
  - Continue to promote ISMS improvement at EFCOG and DOE ISMS Champion meetings
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