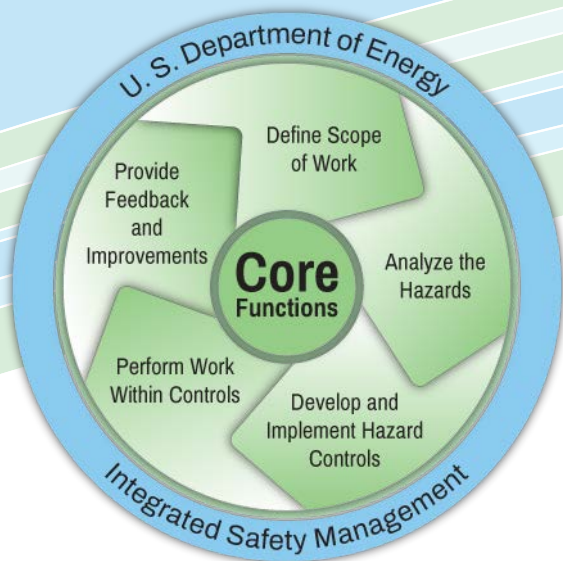


Figure 2.  
ISM Core Functions



## Core Functions

The five core safety management functions (Figure 2.) provide the necessary structure for any work activity that could potentially affect the workers, the public, and the environment. The functions are applied as a continuous cycle with the degree of rigor appropriate to address the type of work activity and the hazards involved.

- 1. Define the Scope of Work:** Missions are translated into work, expectations are set, tasks are identified and prioritized, and resources are allocated.
- 2. Analyze the Hazards:** Hazards associated with the work are identified, analyzed, and categorized.
- 3. Develop and Implement Hazard Controls:** Applicable standards and requirements are identified and agreed upon, controls to prevent/mitigate hazards are identified, the safety envelope is established, and controls are implemented.
- 4. Perform Work within Controls:** Readiness is confirmed and work is performed safely.
- 5. Provide Feedback and Continuous Improvement:** Feedback information on the adequacy of controls is gathered; opportunities for improving the definition and planning of work are identified and implemented.

## Additional Information

Office of Environment, Health, Safety and Security

- <https://www.energy.gov/ehss/environment-health-safety-security>

Worker Safety and Health Policy

- <https://www.energy.gov/ehss/worker-safety-and-health-policy>

Integrated Safety Management (ISM)

- <https://www.energy.gov/ehss/integrated-safety-management-ism>

Safety Culture Improvement Panel

- <https://www.energy.gov/safety-culture/safety-culture-improvement-panel>

## Points of Contact

For additional information or assistance, please contact:

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# A Basic Overview of Integrated Safety Management

Office of Environment, Health, Safety and Security  
U.S. Department of Energy

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# Overview



Kevin L. Dressman

The principle of doing work safely to advance the Department of Energy (DOE) mission remains at the core of integrated safety management (ISM). DOE Policy 450.4A, *Safety Management System Policy*, establishes the Department's expectation that mission goals be accomplished efficiently while ensuring safe operations at all Departmental facilities and activities (Figure 1.).

The DOE mission is diverse and important. The Department's national security, green sustainable energy independence, nuclear deterrence, scientific leadership, and environmental stewardship programs have a positive impact on the United States and the rest of world. ISM has been instrumental in instilling and promoting technical rigor and discipline in how the Department plans, manages, executes, and monitors work performance across a broad range of complex, challenging projects and activities. This degree of vigilance is a prerequisite for safe and efficient mission execution.

The DOE has an impressive safety record due to the hard work and diligence of its Federal and contractor workforce. ISM is the catalyst that enables us as a community to learn from our experiences as well as those of our peers in the private sector and other Federal agencies, in the pursuit of continuous improvement.

The Office of Health and Safety stands ready to support your organization with technical assistance, implementation guidance, and best practices to further the safe execution of mission.

## Kevin L. Dressman

Director, Office of Health and Safety  
Office of Environment, Health, Safety and Security  
U.S. Department of Energy

# Objective

The Department and our contractor partners must systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the worker, the public, and the environment. These policies must be met and carried out using an approach that is tailored and graded to the complexity and inherent risks associated with planned work.

# Guiding Principles

The DOE Guiding Principles provide the framework for the development and implementation of an effective ISM system.

- **Line Management Responsibility for Safety:**  
Line management is directly responsible for the protection of the workers, the public, and the environment.
- **Clear Roles and Responsibilities:**  
Clear and unambiguous lines of authority and responsibility for ensuring safety are established and maintained at all organizational levels within the department and its contractors.
- **Competence Commensurate with Responsibilities:**  
Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.
- **Balanced Priorities:**  
Resources are effectively allocated to address safety, programmatic, and operational considerations. Protecting the workers, the public, and the environment is priority whenever activities are planned and performed.
- **Identification of Safety Standards and Requirements:**  
Before work is performed, the associated hazards are evaluated and an agreed-upon set of safety standards and requirements is established which, if properly implemented, will provide adequate assurance that the workers, the public, and the environment are protected from adverse consequences.
- **Hazard Controls Tailored to Work Being Performed:**  
Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards.
- **Operations Authorization:**  
The conditions and requirements to be satisfied for operations to be initiated and conducted are clearly established and agreed upon.

Figure 1.  
DOE Integrated Safety Management

