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at Los Alamos National Laboratory

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# **Timely Integration of Safeguards and Security with Projects at Los Alamos National Laboratory**

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## **ABSTRACT**

The Safeguards and Security (S&S) Requirements Integration Team at Los Alamos National Laboratory (LANL) has developed and implemented an innovative management process that will be described in detail. This process systematically integrates S&S planning into construction, facility modifications or upgrades, mission changes, and operational projects. It extends and expands the opportunities provided by the DOE project management manual, DOE M 413.3-1. Through a series of LANL documents, a process is defined and implemented that formally identifies an S&S professional to oversee, coordinate, facilitate, and communicate among the identified S&S organizations and the project organizations over the life cycle of the project. The derived benefits, namely (1) elimination/reduction of re-work or costly retrofitting, (2) overall project cost savings because of timely and improved planning, (3) formal documentation, and (4) support of Integrated Safeguards and Security Management at LANL, will be discussed.

## **INTRODUCTION**

How many times, during the construction of a new facility or the modification of an existing facility, have the persons responsible for the project waited until the last possible minute or until after construction is completed to approach the security organizations for their help in safeguarding and securing the facility? It's almost like, "Oh, by the way, do we need access control and a fence around this building and just what are we going to do with our classified anyway?" Not only is it usually difficult; it's also typically expensive to retrofit or plan for safeguards and security after the fact. Safeguards and security organizations are often blamed for budget overruns and delays in facility occupancy and program startup, but these problems are usually due to poor front-end planning.

In an effort to help projects engage safeguards and security in the pre-conceptual or conceptual stages, we implemented a high level formality of operations. We established institutional performance standards and criteria, then implemented requirements and guidance for meeting the expectations. This paved the way for making a business case and developing a process for systematically integrating safeguards and security planning into all LANL construction, facility modifications or upgrades, mission changes, and operational projects. The Safeguards and Security Requirements Integration Team (S&S RIT) serves as the pathway to project engagement and S&S integration.

Project integration with S&S ensures that subject matter experts (SMEs) from the S&S disciplines engage LANL project managers and organization/responsible project authorities in designing, developing, and implementing S&S systems that comply with Department of Energy (DOE) orders, directives, and policies, as well as Laboratory

Implementation Requirements (LIRs), Laboratory Implementation Guidance (LIGs), and Laboratory Performance Requirements (LPRs). This integration in turn supports LANL by raising the level of awareness among planners, designers, engineers, security personnel, and facility users of S&S protection issues that must be considered to minimize loss and vulnerability of our security assets. Using this integration process, LANL can meet its programmatic mission and facility construction growth while balancing programmatic needs, mission requirements, and budget constraints.

Requirements supporting S&S integration are defined in the following LANL documents and processes:

- “Construction Project Management,” LIR 220-01-01.6;
- “Integrated Safeguards and Security Management,” LPR 406-00-00.0;
- *Project Management for the Acquisition of Capital Assets*, DOE Manual 431.3-1;
- DOE orders, policy and guidance documents, and other federal agency requirements;
- Permits and Requirements Identification (PR-ID) Process; and
- Activity Job Hazards Analysis (AJHA).

The Construction Project Management LIR requires project leaders to have security representatives assigned to a project at the earliest phases of all projects over \$500 K. These include General Plant Projects (GPP), Line Item Projects (LI), Large Operating Expense Projects (OPEX), or Facility Revitalization Projects (FRP).

The Integrated Safeguards and Security Management LPR requires that LANL systematically integrate security into all management and work practices at all levels so that the Laboratory mission is accomplished while protecting security interests and always striving for “zero safeguards and security incidents.” This shall be accomplished through effective and efficient integration of security management into all facets of work planning, performance, assessment and improvement. Please note that “security interests” include all LANL-controlled classified and sensitive-unclassified matter, nuclear materials, critical mission assets, biological select agents and toxins, and other government resources associated with accomplishing the LANL mission.

The PR-ID process is a tool for use by project leaders and LANL managers during the pre planning and planning phases of projects to identify S&S required reviews and approvals having potential to impact project planning and execution and to identify the SME who can provide necessary guidance and support.

## **THE INTEGRATION PROCESS**

The S&S RIT serves as the single point of contact for projects with S&S requirements. Its role is to provide S&S project oversight and to coordinate, facilitate, and communicate project requirements to the responsible S&S organization over the life-cycle of the project.

### **Project Identification**

To effectively engage projects, a means of notification must be established to communicate information. As the S&S point of contact, the S&S RIT must be informed of all projects. Presently, the S&S RIT relies on the following sources for notification and gathering project information:

- Membership or participation in institutional groups such as the Laboratory Site Planning and Construction Committee (SPCC), Internal Siting Committee (ISC), Long Range Planning (LRP), and meetings of Integrated Nuclear Planning (INP).
- Communications from senior security advisors (SSAs), division security officers (DSOs) and other S&S SMEs.
- Participation in planning activities such as the siting memorandum (SM) process, PR-ID notification process, Activity Job Hazard Analysis (AJHA), institutional review of and comment on the Ten-Year Comprehensive Site Planning document, and monthly project management reviews with the DOE/NNSA Los Alamos Site Office.
- Established lines of communications (networking) with project management/project managers and institutional planners.

If project identification is fully implemented, zero to very few projects are able to go unnoticed and, therefore, without formal S&S integration.

### **Initial Project Administration**

A centralized project tracking database has been developed by the S&S RIT. A project file is created for each identified project, and the file is updated throughout the life of the project by a team member systems analyst.

### **Project Assignment**

The team leader of the S&S RIT assigns projects to a team member after discussing and reviewing with the team the known information regarding the project. Usually, assignments are based on knowledge, skills, and abilities of the team members, matched to the kind of project that appears to be developing. A team member with a background in nuclear materials will typically be assigned to projects that involve nuclear materials. The team agrees on who gets appointed to which projects. This person then becomes the point of contact or “security representative” for the assigned project.

### **Initial Project Communication**

The systems analyst of the team communicates the name of the person appointed from the S&S RIT as the security representative for the project. This initial communication includes the details available at the time. Attached to the communication is a Preliminary S&S Questionnaire. The owning project organization/responsible authority is asked to complete and return the questionnaire to the project security representative, who will use it to conduct a preliminary S&S evaluation of the project.

### **Preliminary S&S Evaluation**

The assigned security representative compiles information received from the project and uses any other information sources available at the time. The preliminary evaluation is used to establish the following:

- the project scope and assets to be protected in order to determine the level of S&S planning requirements for the project;
- the corresponding effort required from the S&S and other functional SMEs to support the project;
- the requirements from DOE orders, policy and guidance documents, and other federal agencies; and
- the S&S interest level is determined as low, medium or high.

Determining the levels of protection (S&S interest levels) as low, medium, or high is based on a graded approach to the security posture and the assets to be protected.

Projects with **low** preliminary S&S interests are turned over to the appropriate senior security advisor (SSA) and/or division security officer (DSO) for facility-specific S&S guidance and oversight. At this point, projects with low interest are documented as such, and the S&S RIT files become archived. If the scope of the project significantly changes during the life of the project, or any extenuating circumstance surfaces, the project manager, SSA, or DSO may contact the S&S RIT for assistance. The file may be reactivated at this time and the project reevaluated.

Projects with **medium** or **high** preliminary S&S evaluations are usually subject to a formal integration meeting of program representatives and managers of the S&S disciplines. An overview of the project is presented, and discussion centers on the S&S requirements that may be directed to the project during early planning. The S&S managers are then expected to appoint SMEs from their organizations to serve on the integrated S&S project team. As formal responses are received from the S&S managers, appointment letters are prepared and distributed. The exchange of documentation becomes the agreement ~~with the project~~ that the named individuals will execute S&S project activities and provide deliverables defined by the project.

### **S&S Threat and Risk Assessment**

Projects that require threat and risk assessments are scheduled. If an assessment would help determine S&S requirements, that is also scheduled. Participants in a threat and risk assessment include program and security people who are closest to the projects mission and are knowledgeable of S&S requirements.

### **The Role of the Project Security Representative (PSR)**

The individual assigned from the S&S RIT as the PSR continues to facilitate project S&S issues as needed and helps ensure that project deliverables are provided by the appointed S&S SMEs. The PSR ensures that S&S decisions, reviews, reports, guidance, and requirements are documented and kept as part of the S&S project file. The PSR conducts

periodic checks with the project manager/leader and/or owning organization to confirm that S&S issues are addressed as needed.

### **Lessons Learned/Project Close-Out**

The S&S project file provides the basis for project history and will be available at the end of the project life-cycle to address lessons-learned issues. In an established partnership with the Project Management Division (PMD), the Lessons Learned initiative promotes the recurrence of desirable activities, prevents the recurrence of undesirable activities, and contributes to the measurement of operational performance improvement and program effectiveness. The outcome of this partnership process enables the S&S RIT to make process improvements to its established system and recommend appropriate changes outside the team.

When a project is completed, the systems analyst updates the status of the project in the database and archives the project file for future reference.

### **SUMMARY**

DOE M 413.3-1, *Project Management for the Acquisition of Capital Assets*, defines the project management system to be followed for all capital assets acquisitions greater than \$5 million; it contains a Safeguards and Security section that closely parallels many of the same ideas that are incorporated in the S&S RIT process. The LANL process is expanded in scope and includes all projects regardless of dollar value.

Safeguards and security implementation is expensive, but when embraced and integrated in the front-end conceptual planning of a project so that costs are based on carefully derived S&S requirements and are appropriately addressed early in the project budget, surprises are kept to a minimum. Funding sources can then choose between monetary costs and accepting risk. When threat and risks are not analyzed or are considered late in the project, increased factors can consume a disproportionate amount of budget dollars, while other risks go unmitigated or unrealized.

The described LANL process serves as a pathway to promote Integrated Safeguards and Security Management at LANL. When the process is engaged in the pre- or conceptual phases, cost savings resulting from elimination/reduction of re-work or costly retrofitting are realized. The process requires centralized S&S planning and documentation that promotes the ability of the project to evaluate itself and also provides documentation for outside authorized agencies. We have been implementing and modifying the process at LANL for about two years.