
EHS-MS Technology Solution Update

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February 16, 2005



Agenda

- **EPA University Initiative**
- **EHS-MS Organizational Scope**
- **EHS-MS Technology Solution Functional Scope**
- **Project Timelines**
- **PI Space Registration (Phase 1) Update**
- **Findings (Phase 2) Approach**
- **EHS / Industrial Hygiene & Safety Module Relationships**
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Motivation – EPA “University Initiative”

- **The Environmental Protection Agency’s (EPA) “University Initiative” – EPA enforcing environmental laws beyond Industry to Higher Education**
 - ▶ Yale, Brown, Stanford, Boston University among others subject to enforcement
 - ▶ MIT inspection in May 1998 resulted in a Consent Decree w/ the EPA. Lincoln Labs will also comply with the Consent Decree.
- **EPA found common problems in environmental management in higher education**
 - ▶ No organizational infrastructure for compliance w/ environmental laws – locally and centrally
 - ▶ No clear delineation of roles, responsibilities and accountability for compliance – locally and centrally
 - ▶ No systems approach to environmental management
 - ▶ Inadequate institutional knowledge of materials in use locally for compliance and emergency response
 - ▶ Inadequate regulatory training of faculty, principal investigators, staff and students who manage regulated materials



EHS-MS Organizational Scope

- **43 Departments, Labs and Centers**
- **Including Non-research areas: Facilities, Student Life, Athletics**
- **3,351 Lab Rooms (2,481 Campus, 870 MIT LL)**
- **575 Principal Investigators (incl. LL)**
- **49 Departmental EHS Committees**
- **40+/- Local (DLC) EHS Coordinators**
- **18 Central (EHS Office) Lead Contacts**

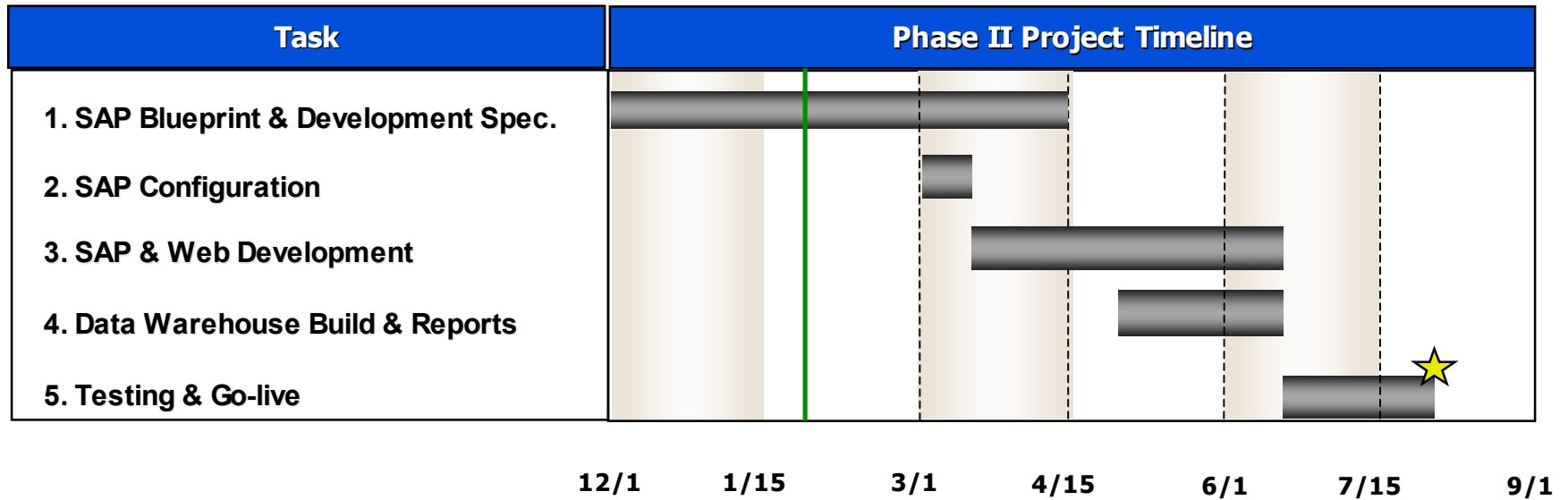


EHS-MS Technology Solution Functional Scope

- **PI Space Registration (Phase 1) - used to register spaces that contain hazardous materials and equipment for principal investigators, supervisors and emergency contacts. (Went live on Nov 8.)**
- **Findings (Phase 2) – application that documents and tracks lab inspections, EHS incidents, corrective actions and consequences. (Currently in design phase.)**
- **Training (Phase 3) - application for students, faculty and employees to assess their EHS training needs, register for live courses and take web-based training as well as maintain all training records for the EHS Office.**
- **End User Reports – easy to use (dashboard) reports for all EHS users are designed to run out of the MIT Data Warehouse.**
- **Central User Reports – summary reports of all data for compliance, root cause analysis, lessons learned and future preventions are designed to run out of the MIT Data Warehouse.**



Project Timelines



PI Space Registration (Phase 1) Update

- **PI Space Registration and SARA (Superfund Amendments and Reauthorization Act) Reporting (Phase 1) successfully went live on November 8, 2004.**
- **Supporting reports from the MIT Data Warehouse went live at the same time.**
- **Interim legacy system for PI Space Registration retired at the same time.**
- **No adverse effects on other SAP applications as a result of the go-live.**
- **Two subsequent bug fix/enhancement releases have been delivered:**
 - ▶ **Release 1.1 was available on Nov 29.**
 - ▶ **Release 1.2 was available on Dec 21.**
- **Annual SARA inventory data collected during “open season” 12/13-1/14.**
- **Lincoln Lab will go-live in Feb. with same scope, same configuration, and re-used web code from Campus.**
- **Initial web version of EHS-MS Manual has been developed and submitted to the EPA (see <http://www.mit.edu/ehs-ms/>).**

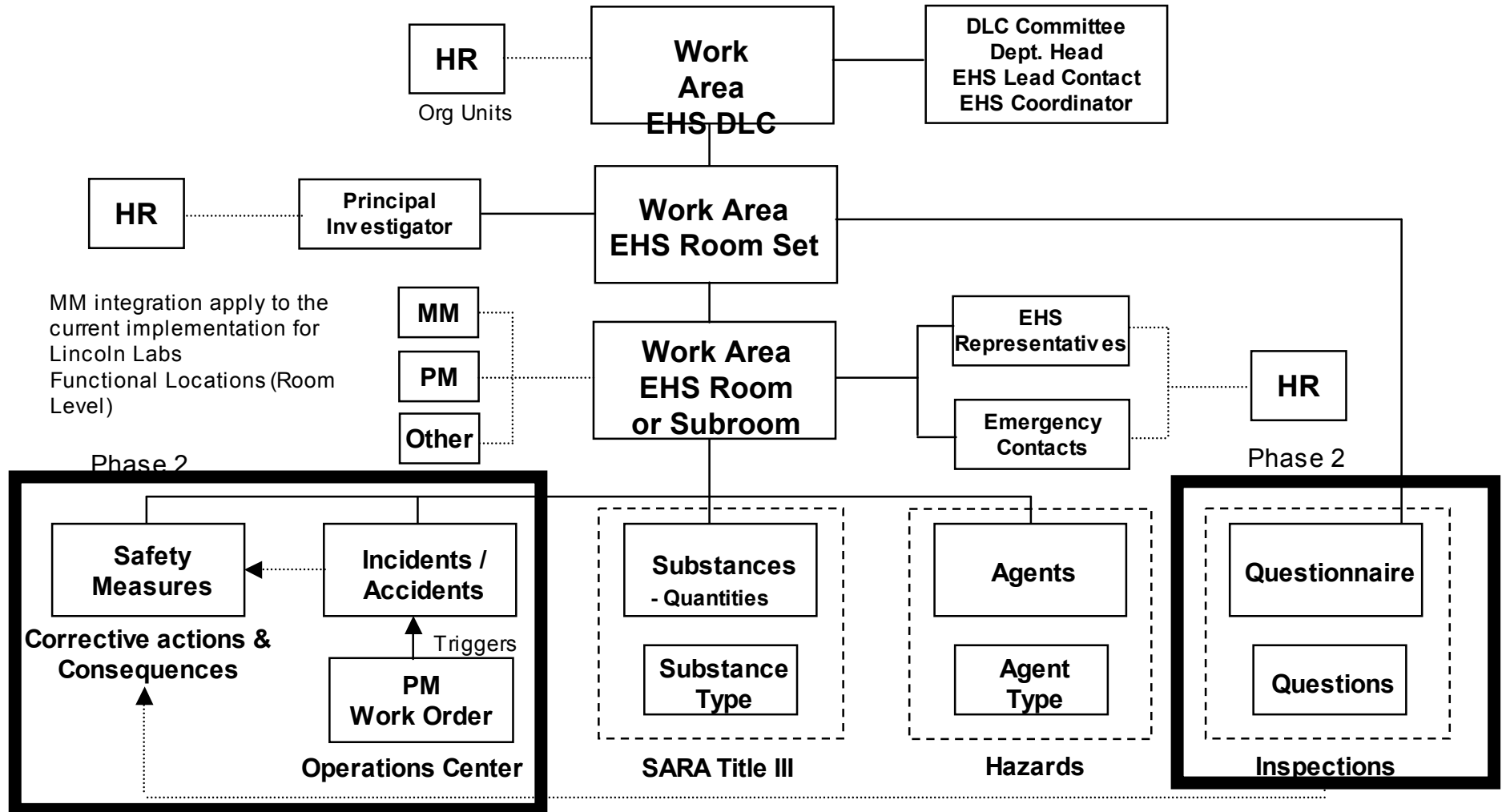


Findings (Phase 2) Approach

- **Phase II Blueprint document and Functional Specifications document are under development. The blueprint document translates the business requirements into SAP requirements and the functional specifications document covers both the web user interface and the technical specifications.**
- **The Technology Team is implementing the EHS module that will leverage standard SAP functionality and integrate with SAP Human Resources and SAP Plant Maintenance (Facilities).**
- **SAP ASAP methodology will be used for SAP components of project**
- **The user Interface is being designed as an easy to use web front-end that will simplify the complexities of the SAP interface.**
- **Lincoln and Campus are working together to develop one cost effective technology solution that will meet the needs of both locations and become the baseline process for future development efforts.**



EHS Module Relationships



Other Items of Note

- **Lessons Learned from Phase 1**
 - ▶ Underestimated scale / work of web development.
 - ▶ Invest more effort in web design work before begin building.

- **Moving to New Web Technology – Web Application Server 6.40**
 - ▶ Replaces Internet Transaction Server used for current SAP web transactions.
 - ▶ SAP's technology for future web development, e.g. portals.
 - ▶ MIT will use for future web development, e.g. EHS, HR/Payroll, etc.
 - ▶ Technical advantages:
 - ◆ Compatible with standard programming language JAVA.
 - ◆ Compatible with standards for inter-enterprise transactions, e.g. web services.
 - ◆ More stable architecture.



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