SAND2011-1750P

RMI PRIMER

The Basics of the Requirements Modernization and Integration Business System

The New Enterprise Business System

The purpose of the Requirements Modernization and Integration (RMI) program is to develop and implement a disciplined, web-based business system that replaces the existing set of federal and M&O Contractor requirements (e.g., D&P Manual, Technical Business Practices, and Product Realization Standards). This new Nuclear Security Enterprise business system (the RMI Business System), which implements NA SD M 452.3-1, is predicated on streamlined and interrelated processes, as well as a set of verifiable and singularly interpretable requirements that drive these processes.

Together, the processes, the requirements, and related guidance comprise RMI content. The RMI Business System organizes this content in a logical framework, or architecture, and manages the linkages to show how the multiple processes and requirements within RMI interrelate.

The Project

The RMI Project is streamlining existing federal and M&O Contractor requirements to eliminate redundancies, inefficiencies, and inconsistencies that are contained in the current requirement set and writing new content where gaps may exist. To accomplish this, teams examine the existing requirements, evaluate them against the new architecture, and define and develop the corresponding RMI content. These cross-Enterprise teams have been working to produce content acceptable to all sites. To obtain Enterprise-wide buy-in, every M&O Contractor within the Nuclear Security Enterprise, as well as NNSA headquarters and site office personnel, is participating by providing team members or subject matter experts.

When all RMI content has been developed, the RMI Project will close, but the RMI Program will continue to ensure the content is managed and kept up-to-date.

RMI

Requirements Modernization and Integration

WHAT IS RMI?

RMI Organization Structure

The **RMI Action Committee,** or RAC, coordinates the entire RMI effort. The RAC is comprised of authorized representatives from selected organizations within NA-10, the site offices, and from each contractor site.

The RAC charters lead teams and delegates coordination of major areas of RMI content to them. Each lead team charters subteams to develop specific areas of RMI content. These content teams include the appropriate federal and contractor subject matter experts to represent the sites most impacted by the content. The RAC uses a gated review process to monitor the content development progress versus schedule.

The **RMI Program Office** (RPO) is a Sandia-led support team comprised of M&O and federal members. The RPO manages the configuration of all the requirements (both new and legacy), supplies content writers, develops and delivers training, supports the content review process, manages the Integrated Master Schedule, standardizes RMI formats, and supplies information technology solutions and support.

The RMI Federal Program Manager and RMI Federal Project Manager together manage the RAC and content team operations and bring RAC-approved content to the senior steering committee for final approval.

RMI

RMI Content Levels

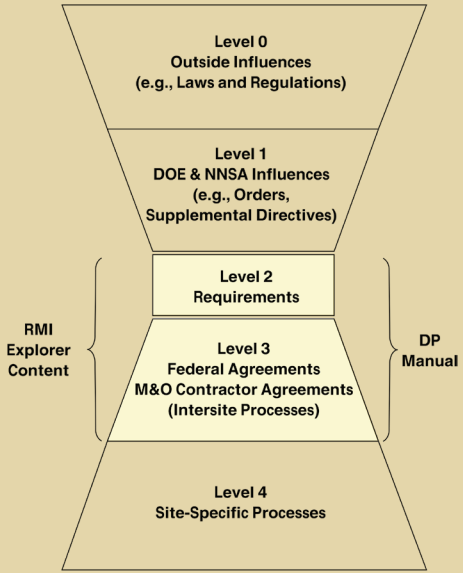
Requirements and processes affecting the Enterprise can be at many levels, ranging from federal laws to site-specific procedures. The accompanying graphic separates these requirements and processes into five levels. While RMI content is only found at levels 2 and 3, it is driven by such things as federal laws, DOE orders, and NNSA supplemental directives that make up levels 0 and 1. RMI requirements, in turn, drive site-specific processes within the Enterprise. The compilation of all RMI content will be called the Defense Programs (DP) Manual and be located in an online repository called RMI Explorer.

LEVEL 2 AND LEVEL 3 RMI CONTENT

Level 2 requirements apply to both federal and contractor sites and are owned by NNSA and its direct federal entities (i.e., HQ, site offices, and the Service Center). Level 2 requirements are identified by a number preceded by an "R" (e.g., R002).

Level 3 processes and requirements represent agreements among either the federal organizations or the contractor sites regarding standardized processes or practices that implement the Level 2 requirements. A Level 3 Federal Agreement (FA) is identified with a number preceded by a "G" (e.g., G001). Similarly, a Level 3 M&O Contractor Agreement (MOCA) is identified with a number preceded by a "C" (e.g., C003).

(continued on reverse)



TOOL CONTENT

An additional type of content is known as a tool, identified with a number preceded by a "T" (e.g., T015). Tools are shared by both federal and M&O Contractor users to assist in the implementation of Level 2 or Level 3 content. Checklists, templates, report contents, specific instructions, or user guides are examples of information that may be found in a tool. Some tools are mandatory, while others are useful as guidance or suggestions.

RMI Content Quick Look

R = Level 2 Requirement

G = Level 3 Federal Agreement

C = Level 3 MOCA

T= Tool (templates, checklists, user guides, instructions)

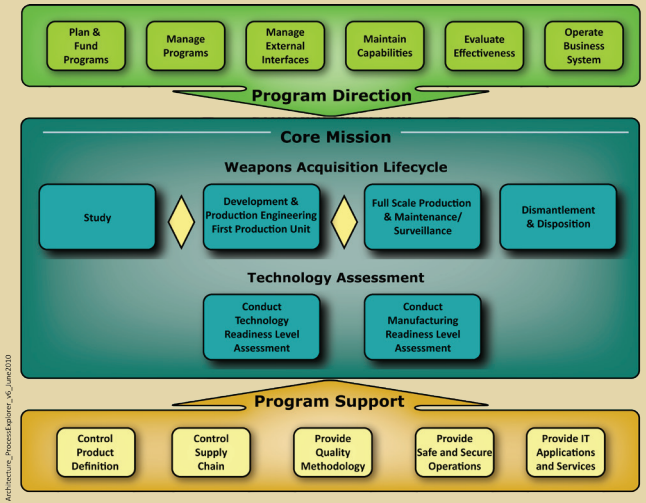
RMI Process Map

The RMI Process Map is a high-level view of the business processes needed to run the Nuclear Security Enterprise. The Process Map and the Content Levels together comprise the RMI Architecture.

The Core Mission consists of the requirements and processes that are essential for developing and delivering product. Core Mission also includes processes for assessing the readiness and maturity of the supporting technologies and manufacturing capabilities.

The processes in the Program Direction category are intended to manage, guide, and finance the Core Mission throughout the product lifecycle. These include program management, risk management, requirements management, and funding. The requirements for RMI governance and compliance are specified in the Operate Business System process.

The processes and requirements needed to support the business across the full spectrum of the product lifecycle are found in Program Support. Examples of these include processes for management of the supply chain, control of product definitions, and provision of information technology services.



RMI

RMI Gated Process

The RAC uses its gated process to provide a structured set of criteria for reviewing and authorizing a subteam's work at pre-determined stages of RMI content development. The gated process is intended to provide assurance that all criteria pertaining to the creation and review of content have been met.

At Gate 1, the subteam submits a proposed scope and justification to the RAC for approval. The subteam also identifies their team members and potential stakeholders. Other RMI teams with related requirements are also initially identified at this time. RAC approval of the subteam's proposed path forward at Gate 1 authorizes the subteam to begin drafting content.

At Gate 2, the subteam submits to the RAC the completed draft content and evidence that

- the subteam, its stakeholders and its interfacing teams, concur with the draft content, and
- the content is written per the appropriate format and writing conventions.

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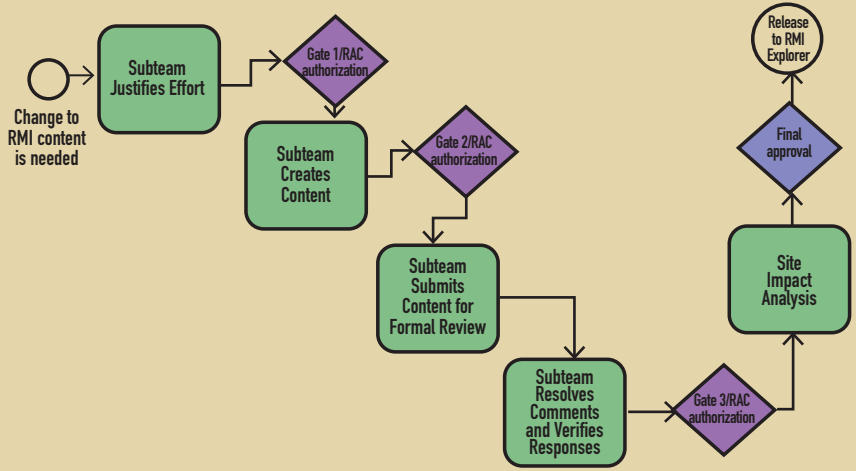

Gate 2 authorization initiates a formal Enterprise-wide review, comment, and revision cycle. Those participating in content review include federal and contractor content experts, potential users, and designees from NNSA headquarters and site offices. Following content improvements, the reviewers evaluate how their comments and suggestions were handled as part of a Site Verification process.

At Gate 3, the subteam submits its final draft content to the RAC. Supporting evidence must show that all reviewers' comments have been considered and the subteam, interfacing teams, and stakeholders concur with the content. The RAC reviews evidence that legacy requirements have been retained, modified, moved elsewhere in the RMI architecture, or archived. The subteam documents traceability from parent requirements and to other interfacing requirements in order to show the flow-down of requirements and to facilitate future revisions.

Following Gate 3 authorization, site offices request a site impact analysis from each M&O Contractor site. The senior steering committee's approval is the final step prior to release of content to RMI Explorer, the web-based repository for all approved RMI content.

Roles and Responsibilities

Many personnel from across the Enterprise are involved in the RMI Project as content moves from initial scoping to completion and release. This table illustrates the breakdown of various review and approval responsibilities by selected NNSA and contractor representatives.

Responsibility*	Senior Governing Body	RMI Action Committee	Site Reviewer (includes federal and contractor sites)
Authorizes content team at Gate 1 to develop content, based on adequacy of planning		X	
Authorizes content team to request an Enterprise-wide review at Gate 2, based on maturity of content		X	
Reviews content and provides comments to content team following Gate 2 team			X
Verifies that all comments submitted during site review have been addressed following comment resolution and revision			X
Endorses RMI content at Gate 3, based on consistency inspections, results of site verification, and fulfillment of all gate criteria		X	
Forwards recommended changes (including new content) to appropriate Senior Steering Committee		X	
Approves Level 2 and Level 3 content following Gate 3, and authorizes release to RMI Explorer	X		
Serves as the final arbiter of disputes that require intersite resolution, after all other avenues have been exhausted	X		
Authorizes any changes to the RMI business system (e.g., architecture, approval process, team structure)		X	
Authorized to speak and make decisions on behalf of their sites	X	X	

**Details regarding these responsibilities can be found in the following content: R002, G001, and C032, available on RMI Document Explorer located at http://rmi.sandia.gov.*

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Visit RMI online: http://rmi.sandia.gov

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Designed by: Lloyd Wilson, Sandia Creative Group - 284-2905, SNL

National Nuclear Security Administration

Los Alamos NATIONAL LABORATORY

SRS savannah river site

B&W Pantex

NSTec

Kansas City Plant National Security Asset

Y-12 National Security Complex

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