RMF 2.0 Prep Step Deep Dive NIST SP 800-37 Revision 2

(Initial Public Draft)

May 2018

Kelley Dempsey
NIST IT Laboratory
Computer Security Division

Naomi Lefkovitz

NIST IT Laboratory

Applied Cybersecurity Division



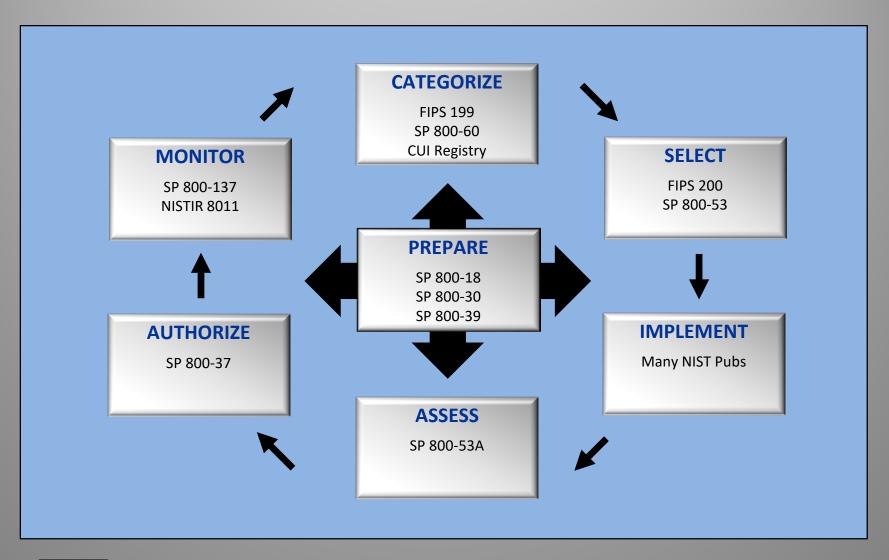
NIST SP 800-37 Revision 2

Risk Management Framework for Information Systems and Organizations

- Initial Public Draft released 9 May 2018
- Public comment period through 22 June 2018
- Final Public Draft planned for July 2018
- Final publication planned for October 2018



RMF 2.0



RMF Improvements in Revision 2

- Addition of the organization and system level
 Prepare Step and associated tasks
- Integrates privacy risk management
- Expansion of Authorization options
- Aligns RMF with CSF
- Aligns RMF with security engineering processes
- Integrates supply chain risk management



Privacy Integration in Revision 2

		PREPARE	CATEGORIZE	SELECT	IMPLEMENT	ASSESS	AUTHORIZE	MONITOR
PRIVACY RISKS	Authorized PII Processing	YES	NO	YES	YES	YES	YES	YES
	Unauthorized System Activity or Behavior Impacting PII	YES	YES	YES	YES	YES	YES	YES

^{*} Except for system description, categorization tasks are not conducted to manage the risks arising from the authorized processing of PII.



Prepare Step Organization Level

- Task 1 ID and assign people to RM roles
- Task 2 Establish an org-wide RM strategy
- Task 3 Assess org-wide risk
- Task 4 Org-wide tailored baselines (optional)
- Task 5 Common Control identification
- Task 6 Prioritize within impact level (optional)
- Task 7 Org-wide ISCM strategy



Prepare Step System Level (1 of 2)

- Task 1 ID missions/business process to be supported
- Task 2 ID interested stakeholders
- Task 3 ID assets that require protection
- Task 4 Determine authorization boundary
- Task 5 ID information types



Prepare Step System Level (2 of 2)

- Task 6 ID information lifecycle for PII (Naomi)
- Task 7 Assess system-level risk
- Task 8 Define protection needs and security and privacy requirements
- Task 9 Determine placement within EA
- Task 10 System registration IAW org policy



New/Revised Tasks in Existing Steps (1 of 2)

- Categorize, Task 2 Review and approve categorization results and decision
- Select, Task 1 Allocate requirements (expanded from ID common controls)
- Select, Task 3 Tailor selected controls
- Select, Task 4 Document planned implementation details in plans
- Implement, Task 2 Document implementation details different from planned (config baseline)



New/Revised Tasks in Existing Steps (2 of 2)

- Assess, Task 1 Select appropriate assessor
- Assess, Task 6 POA&M (moved from Authorize)
- Authorize, Task 2 Risk analysis added to risk determination
- Authorize, Task 3 Respond to risk
- Authorize, Task 5 Report the authorization decision and significant risk



Authorization Options

- Authorization to Operate
 - System Authorization (Traditional or Joint)
 - Type Authorization
 - Facility Authorization
- Common Control Authorization
- Authorization to Use
- Denial of Authorization



What Else is New? (1 of 2)

- Ongoing authorization supplemental guidance (June 2014) incorporated into Appendix F
- RMF and CSF alignment
 - Pre/postconditions reference CSF as applicable, e.g.,
 CSF profile as potential output from Org Prep Task 4
 - Task Outcome tables reference CSF sections, categories, or sub-categories as applicable
 - References for each task list applicable CSF sections



What Else is New? (2 of 2)

- Security engineering process alignment
 - Task references list related 800-160 process as applicable
 - Section 2.3 discusses system elements/enabling systems and tasks focus on stakeholder requirements
- Supply Chain RM alignment
 - Discussion of Supply Chain Risk Management (SCRM) and the RMF added in section 2.6
 - SCRM addressed in Task discussions as applicable
 - SCRM artifacts included in task potential inputs and outputs as applicable
 - SCRM responsibilities noted in Appendix D



Contact Information

Project Leader and NIST Fellow

Dr. Ron Ross (301) 975-5390 ron.ross@nist.gov

Senior Information Security Specialist

Kelley Dempsey (301) 975-2827 kelley.dempsey@nist.gov

Information Security Specialists

Ned Goren (301) 975-5233 nedim.goren@nist.gov

Senior Privacy Policy Advisor

Naomi Lefkovitz (301) 975-2924 naomi.lefkovitz@nist.gov

Team Lead and Senior Information Security Specialist

Victoria Pillitteri (301) 975-8542 victoria.pillitteri@nist.gov

Jody Jacobs (301) 975-4728 jody.Jacobs@nist.gov

Comments: sec-cert@nist.gov (goes to all of the above)

Web: csrc.nist.gov/sec-cert

