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Sandia National Laboratories
NWSMU
Supplier Quality Management

System Overview

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Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company,
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Outline of Presentation

1. Background
2. Supplier Quality Management Framework
3. Supplier Quality Management Procedures
4. Supplier Performance Tracking System
5. Managing Supplier Quality
6. Details
7. Future Plans

Background

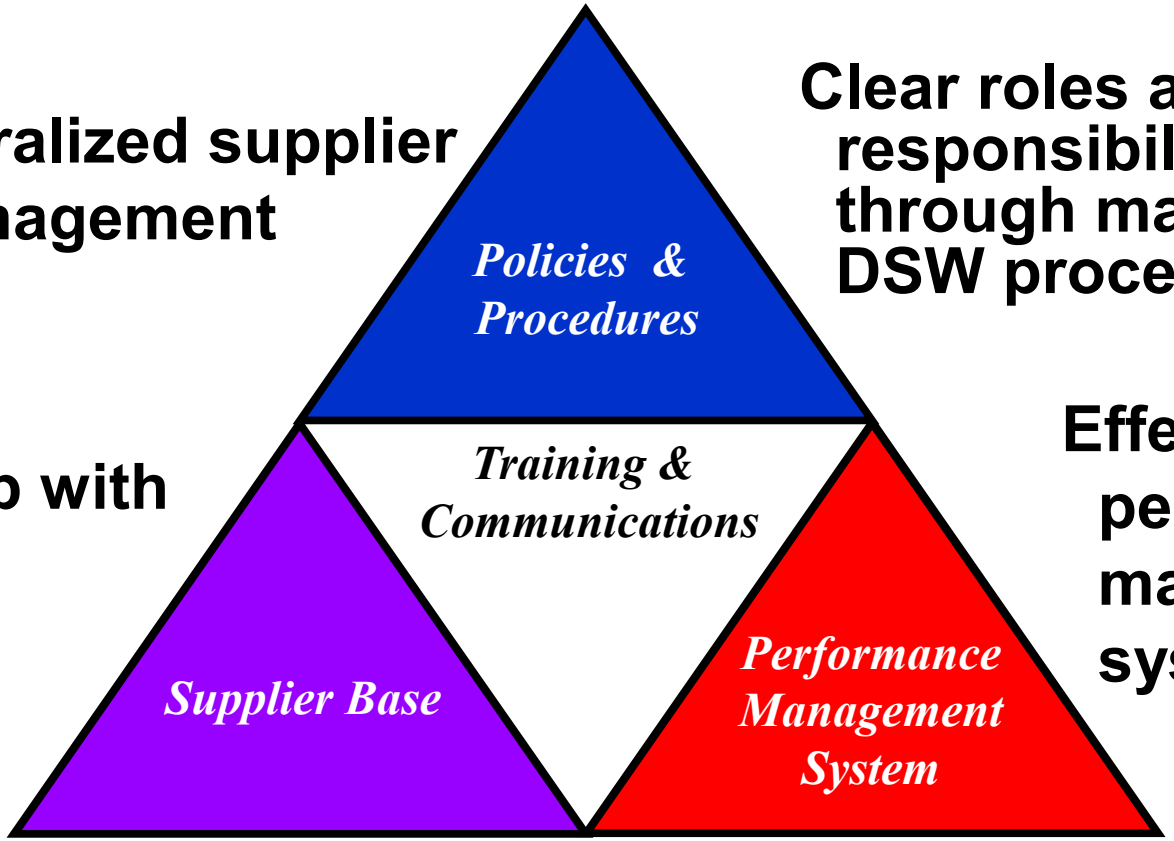
- January – June 2007
  - Cross-functional team lead by the technical line developed and refined a set of procedures, a system, and secured top management support of an independent Supplier Quality Management System for Mark Quality Production
- July 2007
  - Launch of NWSMU's Supplier Quality Management System

Supplier Quality Management

Framework

Centralized supplier management

Clear roles and responsibilities through mandatory DSW procedures

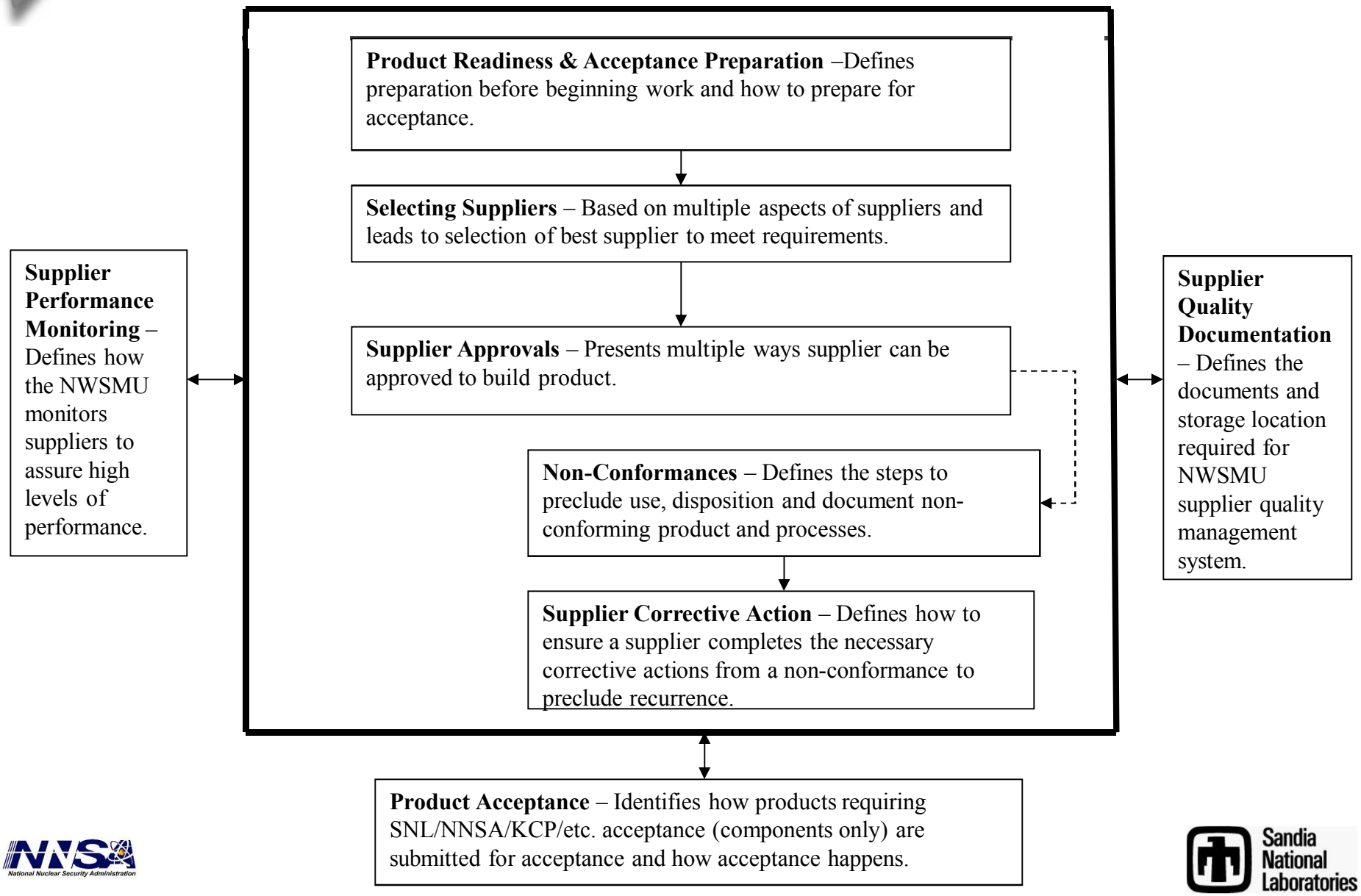


Partnership with suppliers

Effective performance management system

Goal : To develop a Robust System that yields consistently acceptable outputs from the supply base

Supplier Quality Management Procedures Overall Structure



The Procedures: What They Are and What They Are Not

What They Are:

- Mandatory set of Directed Stockpile Work (DSW) procedures for supplier management when doing mark quality work
- What SNL will do to meet requirements of QC-1, TBPs, ISO etc.
- Living set of documents to be revised and changed as we learn and grow SNL production organization
- Work that can be tailored to unique circumstances
- A part of the NWSMU policies and procedures infrastructure, DSW procedures

What They Are Not:

- Replacement for QC-1, TBPs, ISO or any other requirements document
- Tool to eliminate engineering judgment

Supplier Performance Tracking System (SPTS)

Why:

- Capture supplier approval and performance data in a central location
- Need to allow manual data entry
- Create a single supplier list for SNL mark quality work
- Create an information repository for pro-active decision-making

What:

- Collection of "meta-data" on supplier deliveries & assessments for use tracking, calculating metrics, reporting and notifying management of issues
- Only source data for supplier assessments

How:

- Web-based stand-alone system (special access required for data entry and full viewing capabilities)

Supplier Performance Tracking System (SPTS) Functionality:

- Manage consolidated approved supplier list
- Gather supplier performance results
- Track who is using each supplier
- Capture supplier surveillance/observations
- Notify: supplier approvals expiring & non-conformance/corrective actions created

Managing Supplier Performance Becomes More Systematic

Objective:

- Develop and establish a system to continuously monitor, provide feedback and improve supplier performance

Status:

- Supplier Quality Management Council meets quarterly
- Leadership Council currently meets quarterly

Supplier Performance Metrics:

- **On-time delivery**
  - **Critical & Non-Critical Items**
- **Quality**
  - **% Parts Accepted**
  - **Lots w/ Non-conformance**
  - **Lot Quality Index**
  - **Mean Time Between Non-conformance**
  - **Mean Time to Corrective Action Resolution**
  - **Corrective Action Resolution to Target Date**

Supplier Quality Management Council

Purpose/Role:

- Review & oversight of supplier quality, perform supplier monitoring
- Reports to the Directors of Energetic Component Realization and Responsive NG Product Deployment

Responsibilities:

- Reviewing and analyzing data to assess supplier state of health
- Monitoring status of corrective actions
- Elevating issues
- Establishing a continuous feedback and improvement process

Membership:

- Chairperson
  - Line Senior Manager (Rotated)
- Membership
  - 1700, 2400, 2500, 2700, 10200 , 12300 Senior Managers

Details of this Project

- Specific results achieved
  - All external mark quality production governed by a single set of procedures
  - A single system contains supplier approvals, delivery and quality metrics, supplier surveillance data, and registered supplier users
  - Cross functional top management active involvement in the management of the supply base
- Critical implementation success factors
  - Dedicated top management support, talented staff level individuals who “took-up” the challenge
- Barriers to implementation and how overcome
  - Resistance to change was partially overcome through training, constant communication, and management support
- Lessons learned
  - Never underestimate resistance to change

Future Plans

- **Explore options to integrate into a Sandia wide or NWC Supplier Quality Management System. This would include shifting the ownership of the program to the Supply Chain Management Division.**
- **Continue to refine our procedures and system as feedback is received**