Range Sustainment

Enterprise Range Information Systems: Building the Foundation for a DoD Range Enterprise

March 2006

SRS TECHNOLOGIES
Booz | Allen | Hamilton

Agenda

The Range Information Enterprise Initiative

- **Context**
- **Vision**
- **Enterprise Analysis**
- **Way-Ahead**
  - Enterprise Architecture and Plan Development
- **Summary**

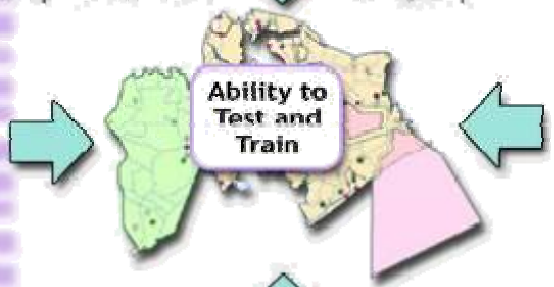
Context:
Sustainable Ranges

A SHIFT FROM:

Encroachment & Reduced Flexibility

ESA and Wildlife Habitat
Wilderness Designations
Frequency Encroachment

Population Encroachment
Commercial Development
Air Quality



Noise Complaints
Air and Space Competition and Congestion

UXO and Munitions Constituents
Cultural Sites
Maritime Issues

TO:

Sustainable Training & Testing

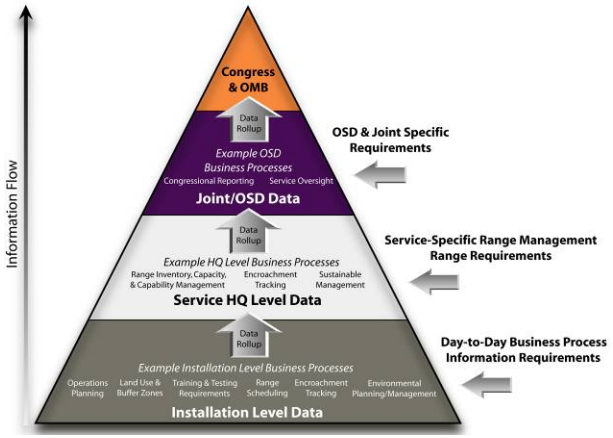
Interdisciplinary Approach
mutual support

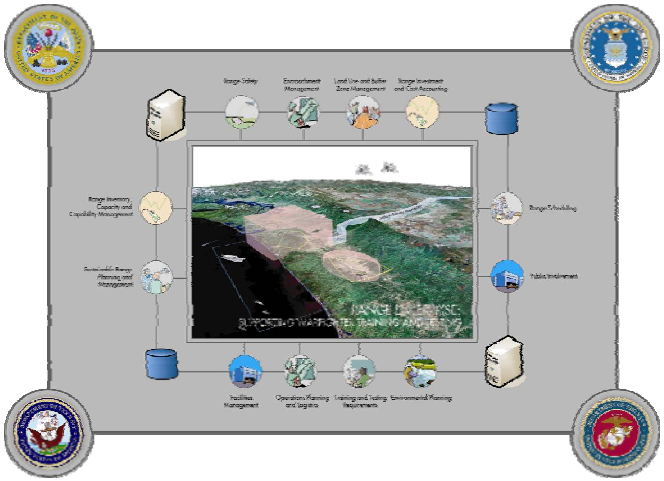
THRU:

A Comprehensive Approach

Concept

- **The DoD Training Transformation and Range Sustainment requires planned transformation initiatives that promote:**
  - Documenting range business process functional areas
  - Cross-Service sharing of training and testing resources and best practices
  - System interoperability and information sharing
  - Creation of highly dynamic systems that directly support range training and testing business needs



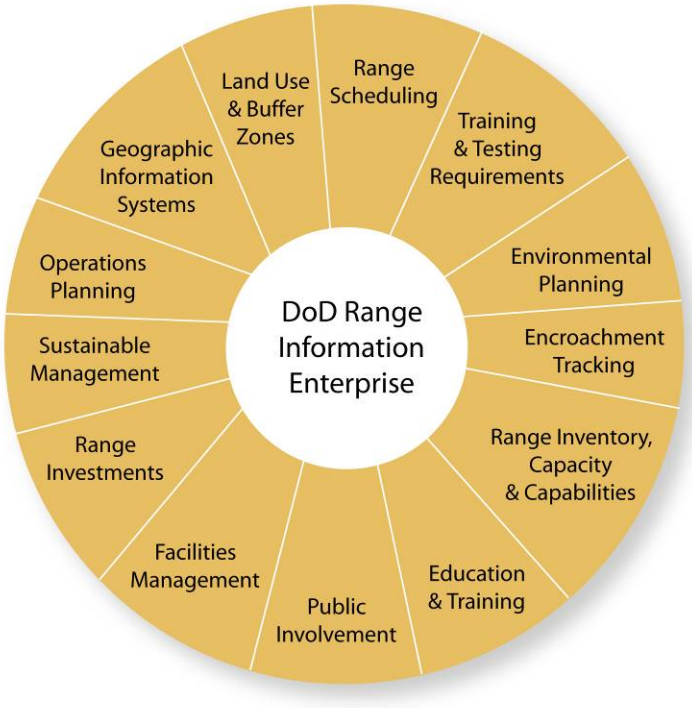


Range Functional Areas

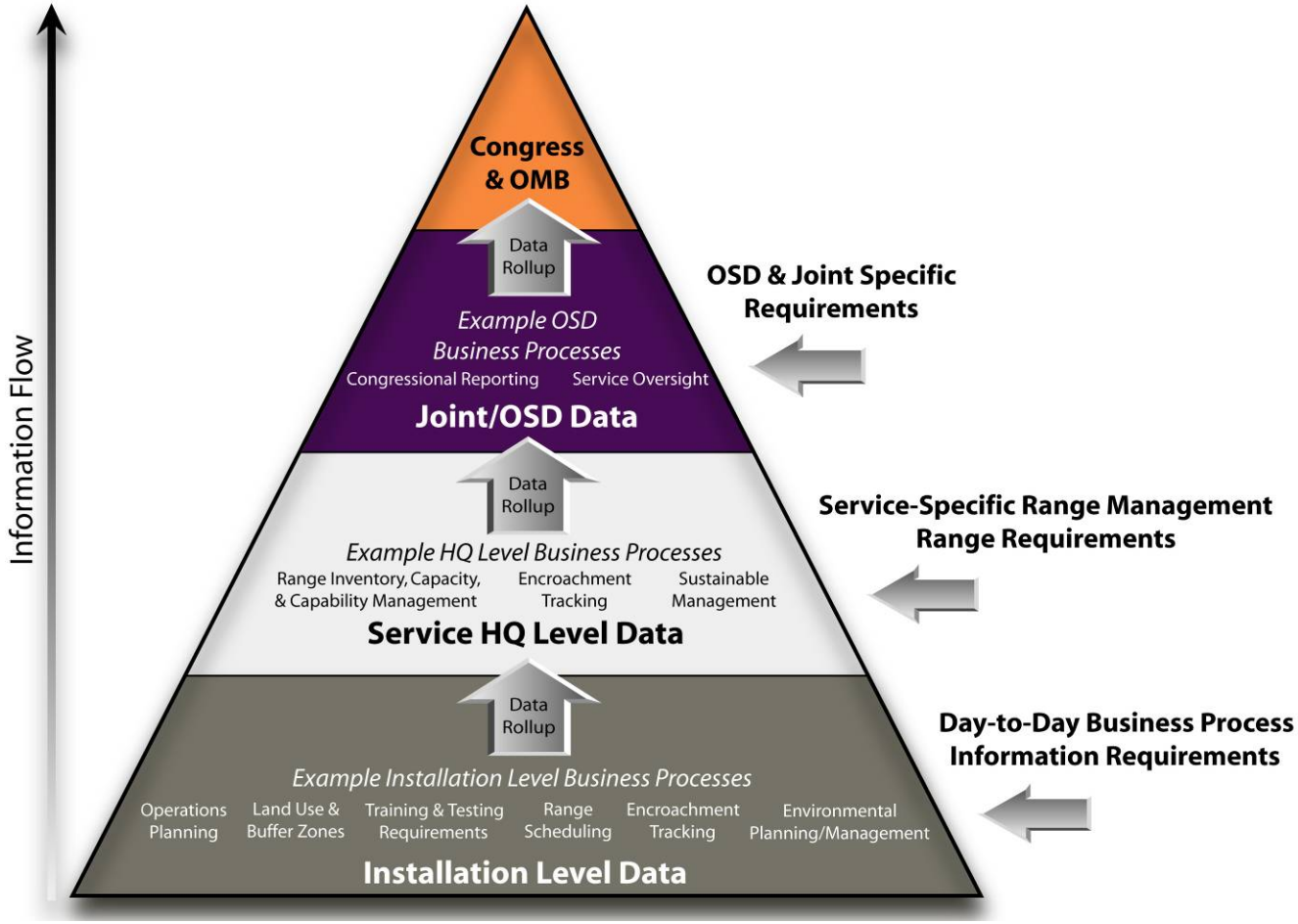
- Range Safety
- Range Inventory, Capacity, and Capability Management
- Encroachment Management
- Land Use and Buffer Zone Management
- Training and Testing Requirements
- Range Scheduling
- Public Involvement
- Environmental Planning
- Range Investments
- Sustainable Range Planning and Management
- Operations Planning and Logistics
- Facilities Management

Cross-Functional Capabilities

- Geographic Information Systems
- Range Database Capabilities
- Management Query and Decision Tools



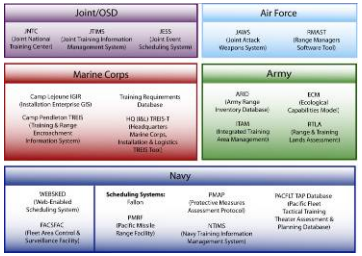
Where Range Information System Functional Areas Occur



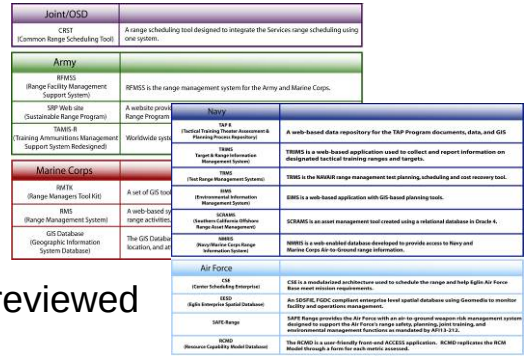
Data Gathering and Analysis

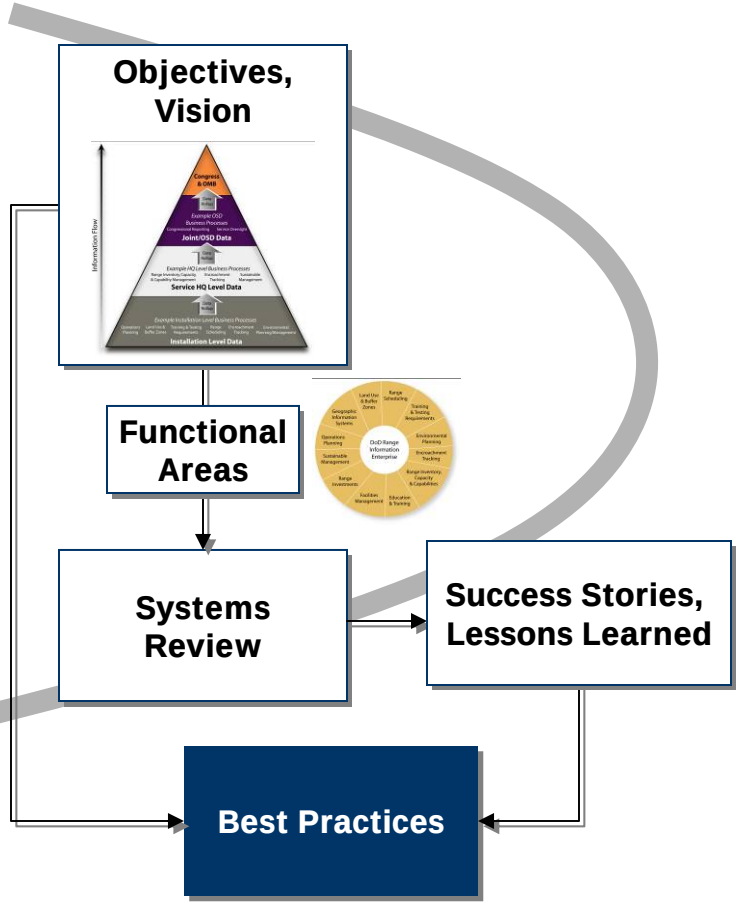
- **32 Systems across the services were identified**
- **17 systems identified by the WIPT Points of Contact across the services were reviewed:**

Systems not reviewed



Systems reviewed

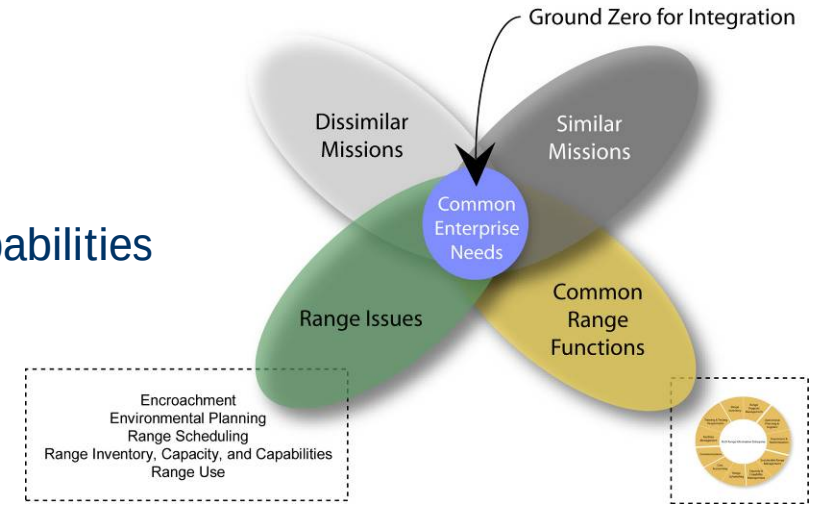




- **Best Practices Identified from system review:**
  - Cross-Service cooperation
  - Enterprise-level system planning
  - Standards-based, modular system development
  - Systems Development Working Groups

Enterprise Analysis: What we learned…

- **Range information systems across the services represent varied levels of maturity**
- **Where range missions are similar, there are similar information needs**
- **Where the range missions differ, there are common issues being faced:**
  - Encroachment
  - Environmental Planning
  - Range Scheduling
  - Range Inventory, Capacity, and Capabilities
  - Range Use



- **The functional areas offer opportunities for systems convergence and improved enterprise solutions**

Enterprise Analysis:
Range Information Systems Best Practices

- **Cross-Service cooperation**
  - Joint Service development of range information systems to meet common mission requirements
    - Example: Range Facility Management Support System (RFMSS) and Range Managers Toolkit (RMTK)
- **Enterprise-level system planning**
  - Enterprise approach to range information development that flows from the range management and operations requirements
    - Example: Navy Tactical Training Theater Assessment and Planning Repository (TAPR) and Environmental Information Management System (EIMS)
- **Standards-based modular development**
  - Range information systems development with modular style architecture based on industry standards
    - Example: Center Scheduling Enterprise (CSE)
- **System development working groups**
  - Establishing executive and working group teams comprised of subject matter experts and stakeholders to plan and manage Service information system efforts and support system development
    - Example: Range Facility Management Support System (RFMSS)

Range Enterprise Plan

- **Range Enterprise Planning**
  - Four-Service approach
  - Stakeholders from all levels of the range community
- **Range Information Systems Baseline**
  - A living document
  - Updated annually
  - Inventory of range information systems and capabilities
- **Requirements Analysis**
  - Identify new and existing requirements for information sharing
  - Highlight any requirements not currently being addressed
- **Architecture Descriptions**
  - Composed of three phases
    - **Current State Architecture**
    - **Future State Architecture**
    - **Gap Analysis and Transition Plan**

A Range Enterprise Architecture would…

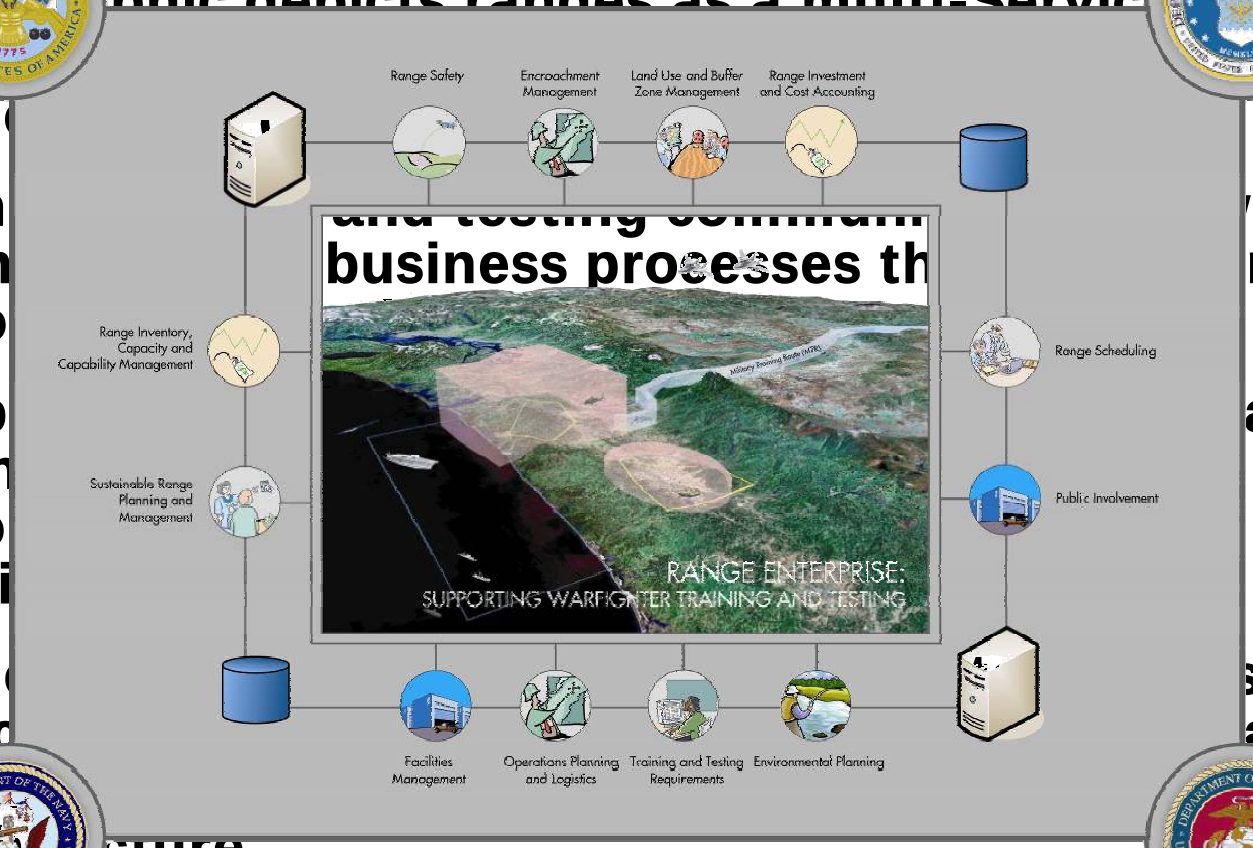
- **Describe the operational and systems elements of DoD's training and testing range business, including —**
  - An architecture for common and interoperable range business practices and information systems
  - Range operational and information requirements and current capabilities using a collaborative, four-Service approach
  - Range issues in relation to Business Transformation and Training Transformation efforts
  - A transformation plan for improving range business processes and increasing the flow of information vertically and horizontally in the Department
- **Benefits**
  - Streamlines business processes, data, and systems across the four services to improve the use of training and testing resources and reduce the costs associated with range-related activities

All Views Product (AV-1 Draft)

- **The All Views (AV-1) product provides the architecture's scope and acts as a guide throughout the architecture's development:**
  - Establishes mission and vision for Range Enterprise Architecture
  - Develops overarching goals and objectives
  - Provides the architecture's viewpoint
  - Stakeholders and organizations inside and outside of the training and testing community
  - Identifies key questions and issues the architecture will address

Operational View Product (OV-1 Draft)

- T…phic depicts ranges as a multi-Servic…y, A… dim…
- Ran… …with a com… …nized into…
- Dep… …ation man… info… busi…
- Coll… …sions, fun… …are th… A… …cture



Summary

- **Range Sustainment and Training Transformation initiatives require:**
  - Comprehensive, multi-disciplinary approach
  - Common, compatible, and interoperable business processes and systems to support common training and testing requirements

- **To accomplish this we need to:**
  - Create an enterprise framework that supports the creation of an architecture supporting the development of common and interoperable range business practices and information systems
  - Encourage Service management of range information system capabilities and investments to meet mission requirements and promote information exchange horizontally and vertically throughout the enterprise