U.S. Federal Enterprise Architecture Data Reference Model (FEA DRM):
Data Governance Strategy
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The Federal 3-Pillar Data Strategy Framework

The Rule: All 3 pillars are required for an effective data strategy.

Goals drive; governance controls; structure defines; and services enable data strategy.

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Federal Data Governance

Data Governance encompasses the people, processes and procedures required to create a consistent, enterprise view of an organization’s data to:

- Promote information sharing
- Improve confidence and trust in data used in decision-making
- Make information accessible, understandable, and reusable
- Reduce cost and duplication
- Improve data security and privacy

Data governance is needed to help agencies determine how they will manage the data relevant for business objectives.

The right information to the right people at the right time!
Components of Federal Data Governance

◊ Federal Data Architecture Subcommittee
◊ Communities of Interest (COI)
  ▪ Collaborative group of stakeholders who require a shared vocabulary and structure to exchange information in pursuit of common goals, interests, mission or business process
  ▪ Empowered by President Management Agenda (Federated Lines of Business) and Agency E-Government Initiatives
  ▪ Members include:
    • Tribal, local, state, federal, public, private and other non-government organizations.
    • Cross functional members including data consumers, producers, program managers, application developers, and data sharing governance groups
COI Objectives

COIs facilitate:

- Data sharing through common COI vocabulary
- Establishment of consistent data management processes
- Preparation of integrated data access plans or information exchange schemas
- Development of information exchange agreements
- Brokerage of conflict resolution among data stewards
- Identification of Authoritative Data Sources (ADS)

COIs work to resolve common issues affecting their communities and develop solutions to promote information sharing.
Example: DOI Data Governance Bodies

- **Executive Sponsor**
  - Appoints Principals, ensures adequate funding, delegates decision authority in areas of data requirements, standardization, and quality.

- **Principal Data Stewards**
  - Coordinates proposed data standards with business data stewards & Bureau Data Architects. Maintains current DOI Data Standards for their respective business line. Submits proposed Data Standards for formal review process. Resolves conflicting data issues. Champions the use of the official DOI data standards.

- **Bureau Data Architect**
  - Data stewards at the Bureau/Office level. Coordinates implementation of new Data standards with SME and DBA. Ensures data security & data quality requirements for each data standard.

- **Business Data Steward**
  - Assists in the implementation of the Data Program among Bureaus in coordination with data stewards. Maintains Bureau unique data standards in coordination with data stewards.

- **DOИ Data Architect**
  - Maintains & publishes the DOИ DRM with Principal Data Stewards and Bureau Data Architects. Promotes the Data Program.

- **DOИ Data Architecture Guidance Body**
  - Coordinates proposed data standards with business data stewards & Bureau Data Architects. Maintains current DOI Data Standards for their respective business line. Submits proposed Data Standards for formal review process. Resolves conflicting data issues. Champions the use of the official DOI data standards.

- **Subject Matter Expert**
  - Coordinates implementation of new Data standards with SME and DBA. Ensures data security & data quality requirements for each data standard.

- **Database Administrator**
  - Data stewards at the Bureau/Office level. Coordinates implementation of new Data standards with SME and DBA. Ensures data security & data quality requirements for each data standard.

- **Business Line Data Panel**
  - Assists in the implementation of the Data Program among Bureaus in coordination with data stewards. Maintains Bureau unique data standards in coordination with data stewards.

- **DAC (Data Advisory Committee)**
  - DOI Data Architecture Guidance Body

- **DOИ E-Gov Team**
  - DOI Data Architecture Guidance Body

- **Coordination with External Standards Bodies and other Communities of Interest (COIs)**
  - DOI Data Architecture Guidance Body

**Color Codes:**
- Yellow = IT perspective
- Green = Business perspective
- Gray = a mixed perspective
Example: Enabling Net-Centricity – DOD Data Strategy

From **Producer-centric:**
- Multiple calls to find data
- Private data – only supports planned consumers
- Data translation needed for understanding when pulled from multiple sources

To **Consumer-centric:**
- Data is visible, accessible, governable and understandable
- Shared data – supports planned and unplanned consumers
- Shared meaning of the data enables understanding

Transition from disparate networks and within legacy systems to an enterprise information environment where known and unanticipated users can access information.
Example: Recreation One-Stop E-Government Initiative

President E-Government Interagency Initiative led by DOI

Requirements:

- Share data among multiple Federal, State, Local and Commercial partners
- Share data across multiple business lines
- Data standards must be easily extensible to accommodate new requirements
- Data sharing standards must be translated to a database and XML
Recreation Community of Interest Members

[Logos of various agencies]

US Army Corps of Engineers
Recreation information is the most sought after information by the e-citizen. There are too many sources for Federal, state and local recreation information.
Example: Recreation One-Stop Governance Committees

COI: Federal Recreation Providers

- Recreation Executive Council
  - Members: Deputy assistant secretary level (DOI, USDA, & DOD)
  - Provide strategic perspective
  - Provide adjudication

- Recreation Managers Committee
  - Members: Senior level Recreation Managers (Smithsonian, DOT, and 16 other agencies)
  - Set priorities
  - Provide requirements and resources

- Various implementation teams
  - Adoption of data standards
  - Data Stewards
  - Data implementation
Example: Recreation One-Stop Findings

High percentage of data reuse identified across the COI.
Example: Recreation One-Stop Data Standards

Recreation Data Exchange Standard (RecML) is generated from the Recreation COI data model
Outcome: Data Sharing with Business Lines and Partners

Recreation One-Stop

- RecML was developed through an interagency coordinated set of discussions and vetted through state and local recreation partners.
- RecML has evolved to include data such as recreation areas, sites, events, and activities.
- Recreation information for federal, state and local managed properties is accessible from a single site.

Data sharing across business lines and with partners (e.g. AAA) and services provider (Reserve America) is done by leveraging RecML.
Questions