



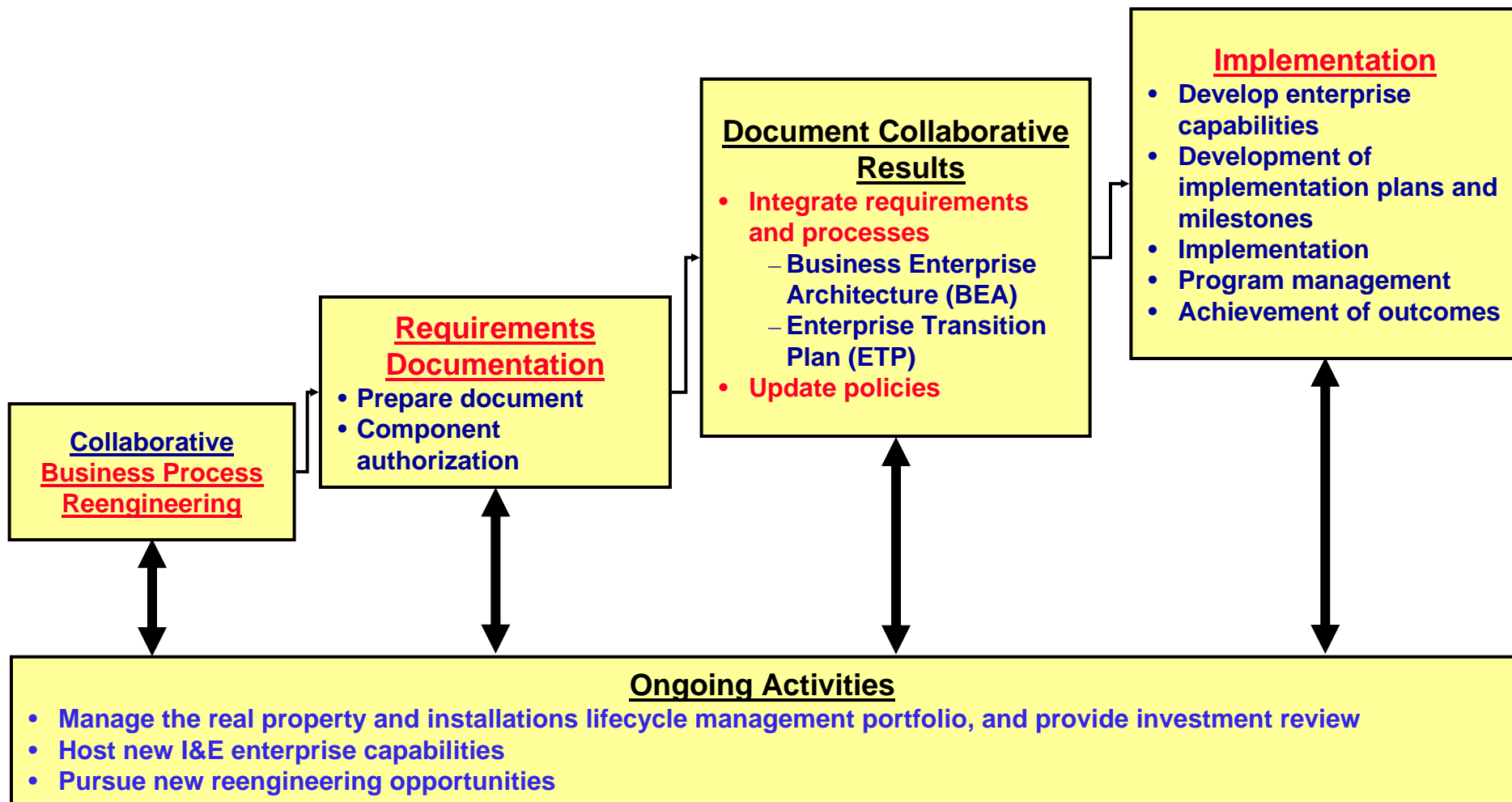
# **Transforming DoD Hazmat Management through Business Process and Data Standardization**

October 23, 2007



# DoD's Approach to Transformation

Acquisition, Technology and Logistics





# Why Reengineer DoD Hazmat Management?

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- Hazardous materials are:
  - Environment, Safety and Occupational Health (ESOH) risk and impact-intensive
  - Cost drivers
- Hazmat BPR:
  - A logical step for ESOH transformation
  - Target of Component-level transformation initiatives
  - “Foot in the door” toward integration of sound ESOH management into mission activities



# Hazmat Problems We Need to Fix

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- **Material Safety Data Sheet (MSDS) Data Issues:**
  - Non-Standard data within and across Components
  - Duplicative IT systems and redundant data entry
  - Questionable data quality and product-data correlation
  - Lack of authoritative data source(s)
  - Today ~ 60 man-years/year to refresh, maintain hazmat data
- **Regulatory Data Issues:**
  - Unreliable information for management decisions
  - Inconsistent compliance reporting
  - Inability to assess regulatory impact on DoD mission
  - Today ~ 40 man-years/year to refresh, maintain regulatory data
- **Process Issues:**
  - Inconsistent approval procedures within and across components
  - Variable protection/support provided to mission, personnel & environment



# Evolution of DoD Hazmat Management

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- 1990's – Implementation of Hazmat “Pharmacies” revolutionized Hazmat management across DoD
  - Reduced usage
  - Controlled issuance
  - Reduced waste and unauthorized use
- 2005/2006 – DoD Hazmat BPR jointly defined “next steps” in evolution of Hazmat management
  - Leveraged Services’ and DLA reengineering efforts
  - Focus Areas: Jointness/interoperability; data standardization and accessibility; product-data linkage; Hazmat “process” control
- 2007 and beyond – implement Hazmat BPR requirements



# Hazmat BPR Results (Requirements)

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- **Hazmat Requirements Document (19 Jul 06):**
  - **Standard data** – common language for Hazmat management supporting ESOH & logistics needs
  - **Standard Hazmat business process** –
    - Incorporates best practices
    - Leverages management system framework (EMS)
    - ESOH (operational) controls development
    - Supports sustainable operations

***Hazmat transformation in DoD employs a Management System framework – DoD Directive, ESOH***



# What Are DoD Hazmat Requirements?

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- **Product Hazard Data (PHD) requirements**
  - Chemical & regulatory data for product *ingredients* (+/-360 data elements)
  - Material Safety Data Sheets & assoc. data elements (ANSI Z400.1-2004)
  - Logistics and government-unique data for hazardous products
- **Hazardous Process Authorization (HPA) requirements**
  - The business process supporting development and implementation of operational controls for Hazmat-related *activities, products and services*
  - Business process (EMS) and associated data requirements, such as aspects and impacts, objectives and targets, and operational controls
  - May be characterized as the Environmental Management Program for Hazmat implementation. (See ISO 14001, Section 4.3.4.)
- **Operational Business Rules – two major categories:**
  - Management of hazardous products and associated “Product Hazard Data” throughout the supply chain/product lifecycle
  - Operational control of Hazmat *activities, products and services*



# Implementing DoD Hazmat Requirements

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- **Overall objective:** institutionalize standard data and reengineered Hazmat business process across DoD
- **Primary targets for Component-level implementation**
  - IT systems
  - Environmental management systems (EMS)
- **Key enablers – existing:**
  - DoD and Component policy (Hazmat, EMS, ORM...)
  - BEA 4.1 and the systems certification process administered by the I&E Investment Review Board
  - Component (HQ-level) and installation EMSs
- **Key enabler – in development:** Hazmat Master Data Capability (Hazmat MDC)





# Hazmat Master Data Capability

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- **What is it?**
  - Central source for authoritative Hazmat data
  - Extension of “Item” portion of the Logistics Master Data Capability
- **Important facts about the Hazmat MDC:**
  - Developed by DLIS -- BTA’s “Master Data Fast Track” initiative
  - Collaborative effort: DoD leadership, Military Departments, DLA
  - Development to be executed in two parts:
    - o Part 1 - Chemical and regulatory reference data (IOC: 28 Sep 07)
    - o Part 2 - Product-specific hazard data (MSDS) (IOC: 30 Sep 08)
  - End-state: Support the DoD standard Hazmat data requirements for chemical and regulatory data, MSDS data, logistics data, and government-unique data
  - Estimated cost avoidance of \$10M annually when fully operational



# On-going DoD Implementation Actions

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- Component-level implementation planning
- Integrate into DoD policies:
  - *HAZCOM*
  - *Supply Chain Material Management*
  - *Transportation and Traffic Management*
- Establish the Hazmat Configuration Support Panel
- Develop the Hazmat MDC
  - Ensure reliability ✓
  - Ensure availability ✓
  - Ensure accessibility – next major milestone



# Benefits of BPR Implementation

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- MSDS and Regulatory Data Solution: Hazmat Master Data Capability
  - Eliminates redundancy: enter and maintain data at one location vs. 250+ across DoD
  - Provides ready access to standard, authoritative data
  - Integrated with Logistics Master Data Capability
- Process Solution:
  - Improved operational support, protection and control
  - Reductions in Hazmat waste, releases, exposures...

***Hazmat program data becomes authoritative for all ESOH program areas:  
“Enter Data Once...Use it Many Times”***



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**Questions?**