Integrity - Service - Excellence

Sustainment Related Data Needs and CBM+

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- **AF Data Collection and Storage Goals**

- **Expeditionary Combat Support System (ECSS)**

- **CBM+ and Life Cycle Systems Engineering – Sustainment (LCSE-S) Initiatives**

- **Weapon System Integrity Program (WSIP) Updates**

AF Goals

- **Types of Data: Maintenance, Usage, Failure, and Safety**
- **Improve accuracy of data and data collection rates**
- **Standardize and improve access to data**
- **Standardized processes for system data collection, system monitoring, and performance assessment**
  - **ASIP and other WSIP data part of this normalized process versus a unique process for each system**
- **Standardize and improve prognostics and proactive analysis tools**
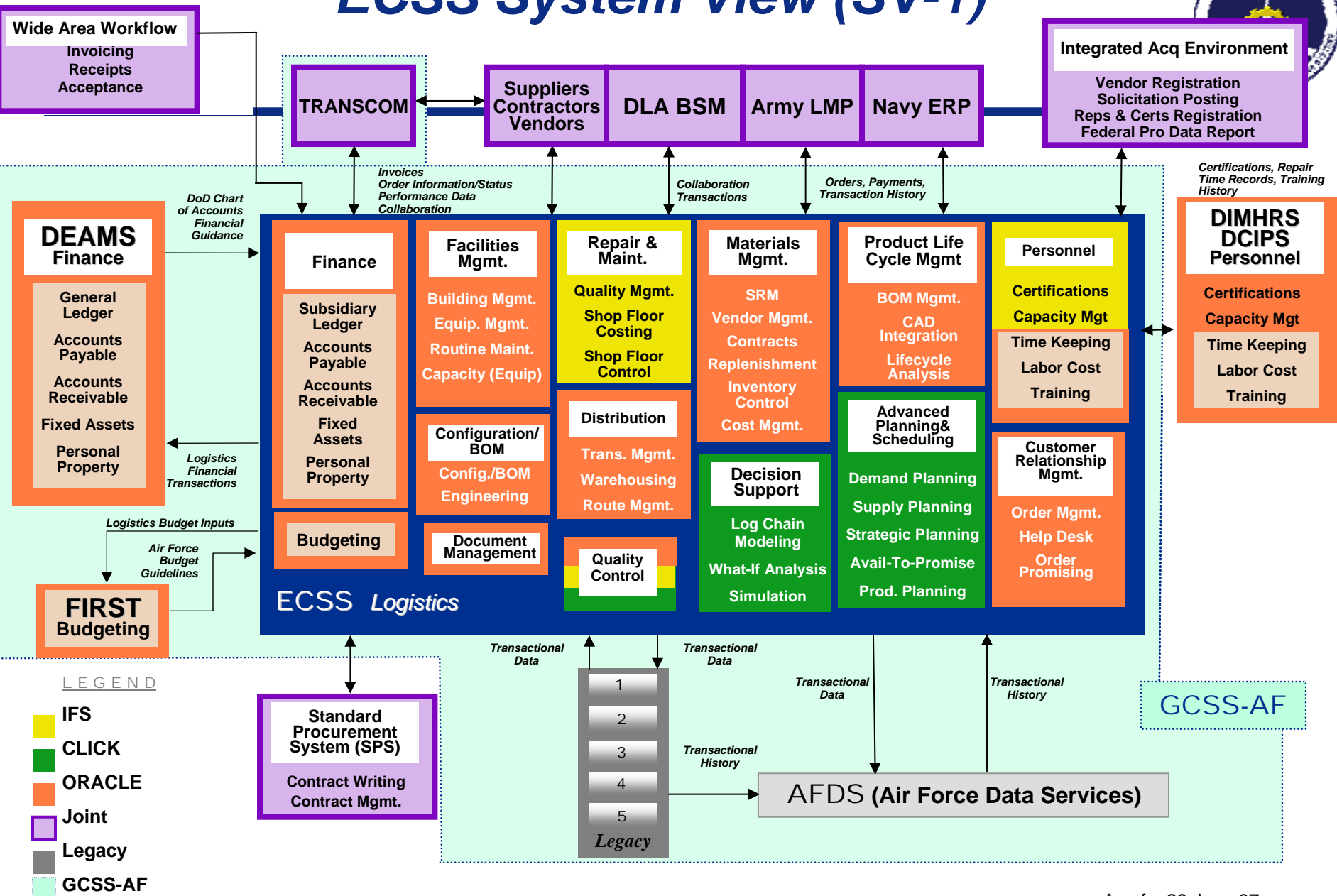 - **Feedback into enterprise planning processes**

- **ECSS**
  - **AF COTS Enterprise Resource Planning (ERP) solution that will standardize the data collection and storage process**
    - **Maintenance & Repair Organization (MRO) Application**
    - **Advanced Planning & Scheduling (APS) Application**
    - **Overall ERP Application**
    - **Product Life Cycle Management (PLM) Application - TBD**

ECSS System View (SV-1)

Expeditionary Combat Support System (ECSS)

- **Review of data collection requirements during on-going process blueprinting and legacy system deconstructions**

- **Feedback from blueprinting & legacy system deconstructions processes when they delete/change a data collection requirement**

- **ID system unique data requirements that may not be covered by ECSS- TBD**

CBM+ & LCSE-S Initiatives

- **CBM+**
  - **Standardized federated data mining tool(s)**
  - **Development Prognostics analysis tools**
  - **Determine what analytic, data collection, and data manipulation functions stay on Legacy/OEM IT systems versus and what will reside on ERP or GCSS?**
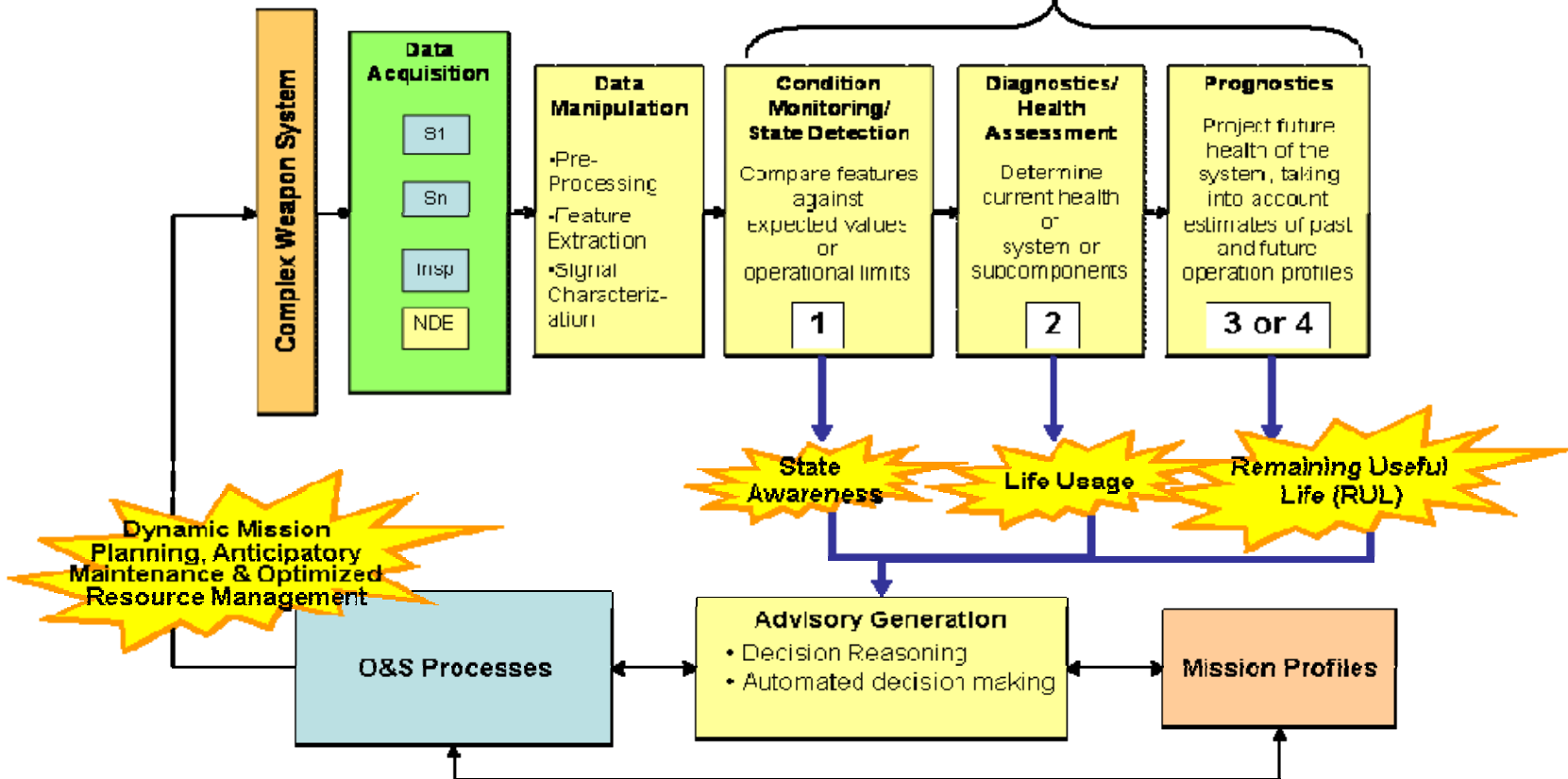
- **LCSE-S**
  - **Identify current and new data collection requirements for all systems and what unique IT systems are currently being used**
  - **Improved and standardized system health monitoring and performance assessment <u>Process</u> and metrics**
  - **Impact of deleting work unit code (WUC) study**
  - **How malfunction (HOWMAL) codes improvements**

CBM+ Functional View

Usage data collection systems: EHM (CETADS & MIDC), ASMIS, AIRCAT, AFKS (flight hours only), manual forms, OEM systems, etc

MX data collection systems: EHM (CETADS & MIDC), ASMIS, AIRCAT, AFKS (flight hours only), manual forms, OEM systems, IFS, /REMIS/CEMS, GCSS data services, etc
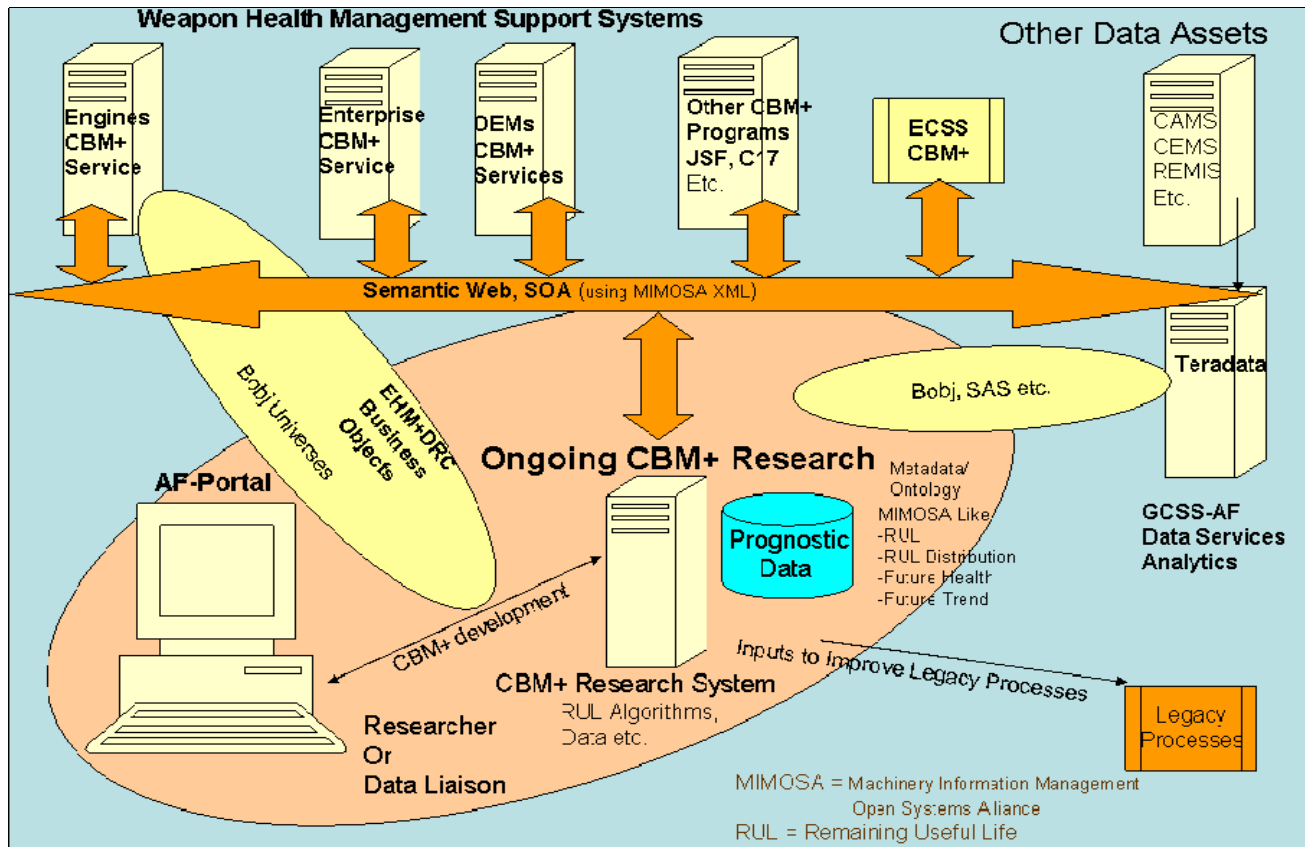
CBM+ Systems View

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CBM+ Functional & System View

- **Functions & Interfaces still to be addressed**
  - **Data Types – MX (failure, inspection , replacements, repair, recorders, sensors), usage (hours and mission profiles, recorders, sensors), planned usage changes**
  - **Define the feedback to O&S processes (CAM, planning, scheduling, tech orders, inspections, requirements, DLA SPRs, TCTOs, etc)**
  - **Define the feedback acquisition processes**
  - **Advisory generation and risk assessments**
  - **RCM and FEMCA tools**
  - **Interfaces with PLM for product data and models**
  - **Interfaces with WSIPs**
  - **Define ECSS as MRO, APS, and Oracle**
  - **What functions stay on the Legacy/OEM systems versus what functions reside on AF CBM+ Environment?**

Weapon System Integrity Program (WSIP) Updates

- **AF Instructions, Pamphlets and MIL-STDs for all integrity programs same as ASIP**

  - **Add manufacturing and quality as cross cutting processes for all integrity programs**

  - **Relate CBM+ and Individual Aircraft tracking (IAT) as a cross cutting processes for all integrity programs**

■ Questions?