

Headquarters U.S. Air Force

Integrity - Service - Excellence

Target Baseline

-- Consolidated Enterprise IT Baseline --



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-
- **Eliminate the duplicative work performed by projects in the development and fielding of similar infrastructure requirements, but uniquely instantiated.**
 - **Remediate the risk and difficulty in maintaining and supporting a large number of different architectures (COTS with specific configurations) that can result in many and potentially conflicting support conditions.**
 - **Ensure that the AFNET is secure and that all computer/network configurations are aligned to the same security standards.**
 - **Be more funds and time efficient in how we develop mission and business systems.**
 - **Develop a target architecture which will be the basis for Implementation/Operational Baselines while supporting the uniform injection of new technologies in the AF.**



Advantages

- **Target Baseline will be used as a basis for the development of Standard Platforms (Platform as a Service – PaaS) capability.**
- **The PaaS will be a C&A complete platform when provided.**
- **Applications will inherit the C&A completed for the Standard Platform resulting in shorter time to function delivery.**
- **Standard Platform would ensure the workability of the system within the AFNET and that SLAs can be met.**
- **Monitoring and Maintenance of the PaaS will be more effective since PaaS configurations will be well know and personnel will have suitable training and experience.**
- **IT function set from which to research new capabilities; interaction with the Enterprise Architecture to ensure we maintain a current/advanced technology profile.**



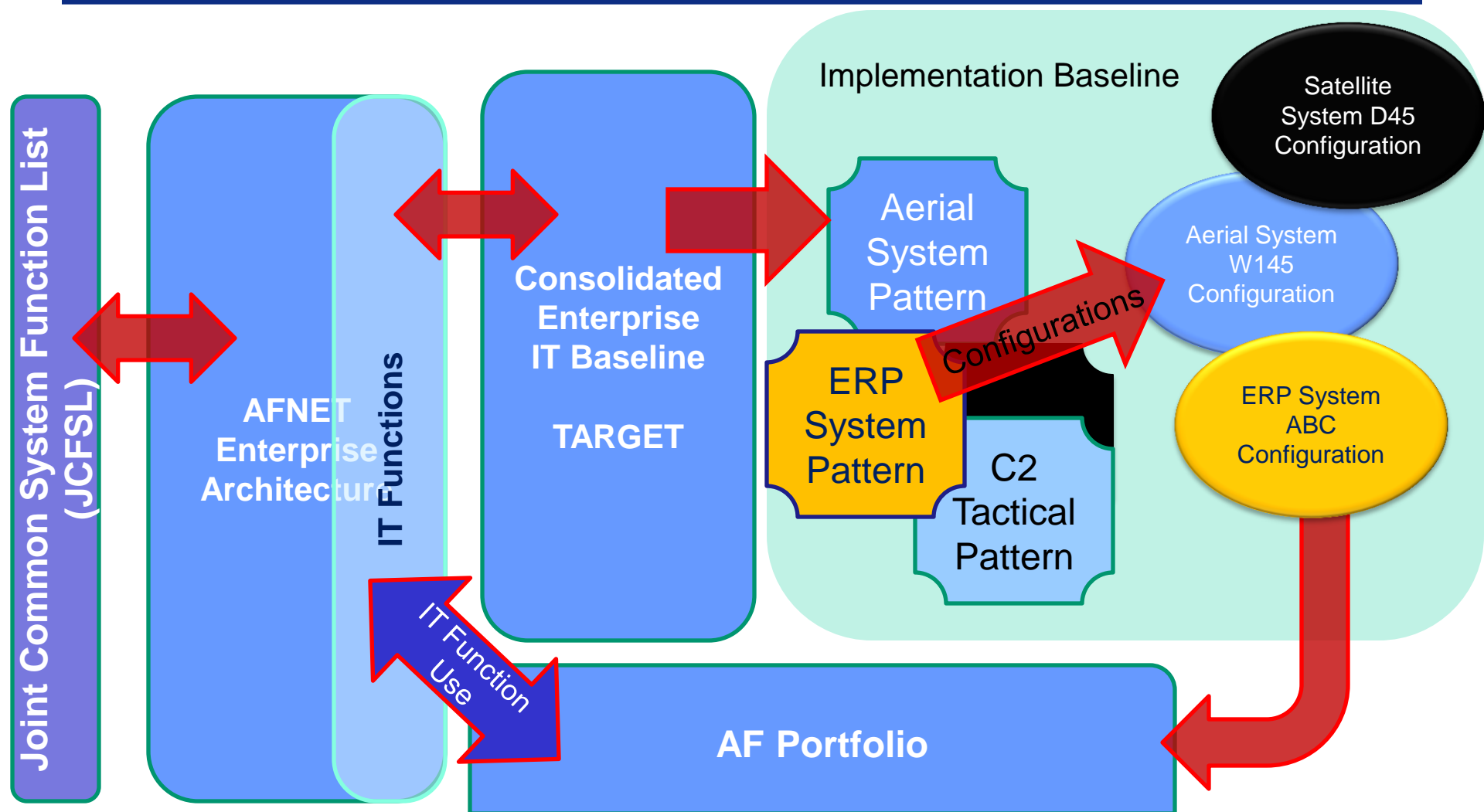
Starting Point – Target Baseline

Joint Common System Function List (JCSFL)

7	COMMUNICATIONS – Level-1	This Level-1 function provides the ability to communicate information formats such as data, voice, digital, imagery, and video.
7.1	Provide Ability to Communicate - Group	This group contains all functions related to providing the ability to communicate.
7.3	Data Link Services - Group	This group contains all functions related to data link services.
8	ENTERPRISE IT and NETWORK INFRASTRUCTURE – Level-1	This Level-1 function provides the set of services necessary to provision, host, operate, and manage the assured computing environment.
8.1	Network Services - Group	This group contains all functions related to network services including managing the network, providing network access, planning the network, and assessing the network performance.
8.2	Provide Information Assurance - Group	This group contains all functions related to information assurance.
8.3	Network Establishment - Group	This group contains all functions related to establishing a network including connections, nodes, transmission paths, and network availability.
8.4	IT Computing Services - Group	This group contains all functions related to IT computing applications such as operating system functional applications and services.
8.5	Operate or Maintain Network - Group	This group contains all functions related to operating a network including: transmitting and receiving information, maintaining network equipment, etc.
8.6	Network Configuration - Group	This group contains all functions related to configuring a network, including: installations, de-installations, interfacing, and access configurations.
8.7	Manage Data - Group	This group contains all functions related to data management including actions taken with data, actions performed on data, storage and manipulation of data, and employing guidelines with data.
8.8	Perform User Management Services - Group	This group contains all functions related to user management including users of a network, user permissions and roles, user access, and user interface management.
8.9	Enterprise Network Environment Management - Group	This group contains all functions related to managing the network enterprise environment.
8.10	Provide Human Machine Interface (HMI) - Group	This group contains all functions related to interfacing the human user with the electronic machine equipment.
8.11	Fuse Network Data - Group	This group contains all functions related to the fusion of data.
9	SYSTEM TEST, MAINTENANCE, AND PROTECTION – Level-1	This Level-1 function provides the ability to ensure systems are tested, maintained, and protected in order to maintain functionality.
9.1	System Maintenance - Group	This group contains all functions related to performing system maintenance.
9.2	System Test - Group	This group contains all functions related to testing the system in order to find and isolate problems.
9.3	System Protection - Group	This group contains all functions related to protecting the physical system from harm.



Target Baseline





Target Baseline

Implementation Baseline

Satellite System D45 Configuration

IT FUNCTION CATEGORIES

- ☀ **NetOps Agility**
- ☀ **Secured Availability**
- ☀ **Data and Services**
- ☀ **Computing Infrastructure Readiness**
- ☀ **Communications Readiness**

Joint Common System Function List (JCSFL)

AFNET Enterprise Architecture

IT Functions

IT Function Use

AF Portfolio



Target Baseline

Joint Common System Function List (JCSFL)

THE TARGET BASELINE - ALL new systems and transformations to be compliant. NOT what is necessary to support the current legacy environment. Note that programs will actually start using target architecture based guidelines/protocols/standards potentially in late 2011 and in 2012.

AFNET Enterprise Architecture

IT Functions

Consolidated Enterprise IT Baseline

TARGET

Implementation Baseline

Satellite System D45 Configuration

TARGET BASELINE

- IT Function Technical Description
- Applicable Layer(s): Terrestrial, Aerial, Space (SINE definition)
- Applicable Standards (e.g. STIGs, TOs, ANSI, OSI)
- Protocols, guidelines, use case examples, flows, features
- Interfaces with other IT Functions (e.g., security overlay)
- Current Instantiation Examples (e.g. GOTS, COTS)
- Other information
- Technical Issues to be resolved
- Future Target Technology Research Projects (e.g. AFRL, NSA, DARPA, AF, vendors)

IT Function Use



Target Baseline Touchpoints

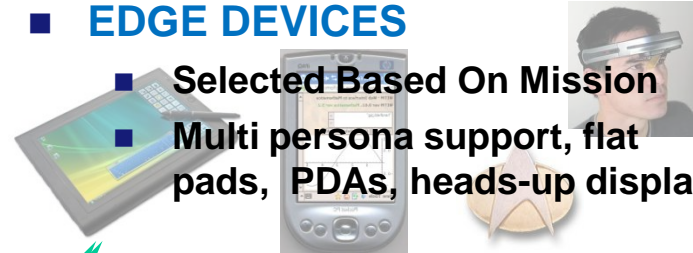
■ DATA

- Authoritative Data Sources
- Official Data Records
- Current Data – Not Warehoused Data



■ EDGE DEVICES

- Selected Based On Mission
- Multi persona support, flat pads, PDAs, heads-up displays



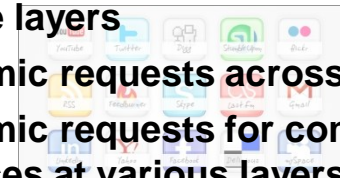
■ COMMUNICATIONS

- Single Integrated Network Environment
- Secure mobile, wireless



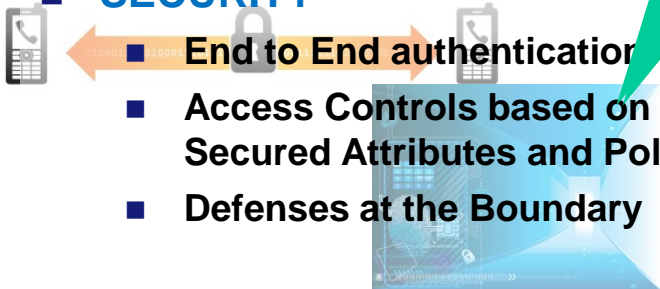
■ FUNCTIONS

- Web Services – at Terrestrial, Aerial, Space layers
- Dynamic requests across the layers
- Dynamic requests for combining services at various layers



■ SECURITY

- End to End authentication
- Access Controls based on Secured Attributes and Policy
- Defenses at the Boundary



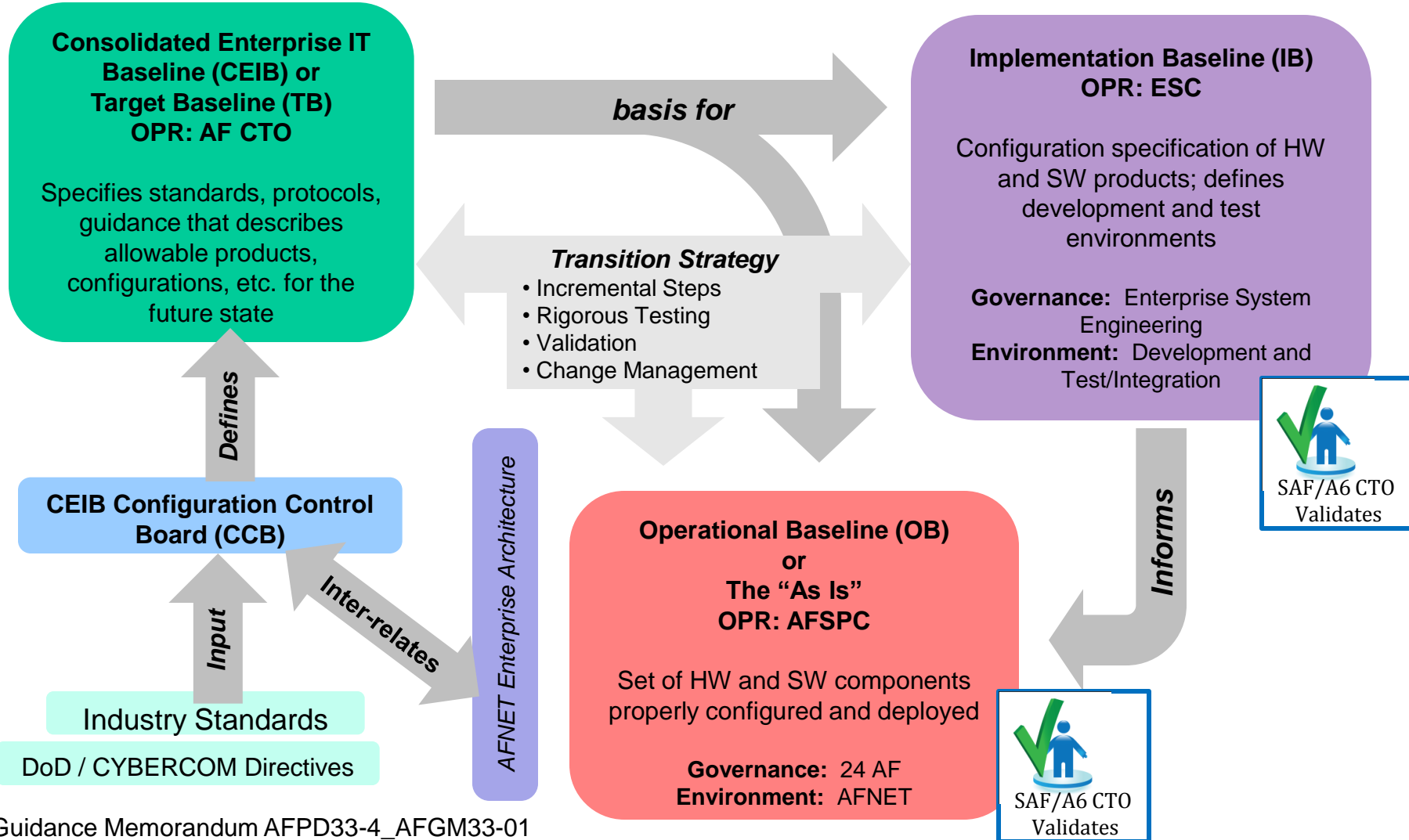
■ COMPUTING

- Consolidated Facilities
- Secured Virtualization (Cloud)
- Grid Computing





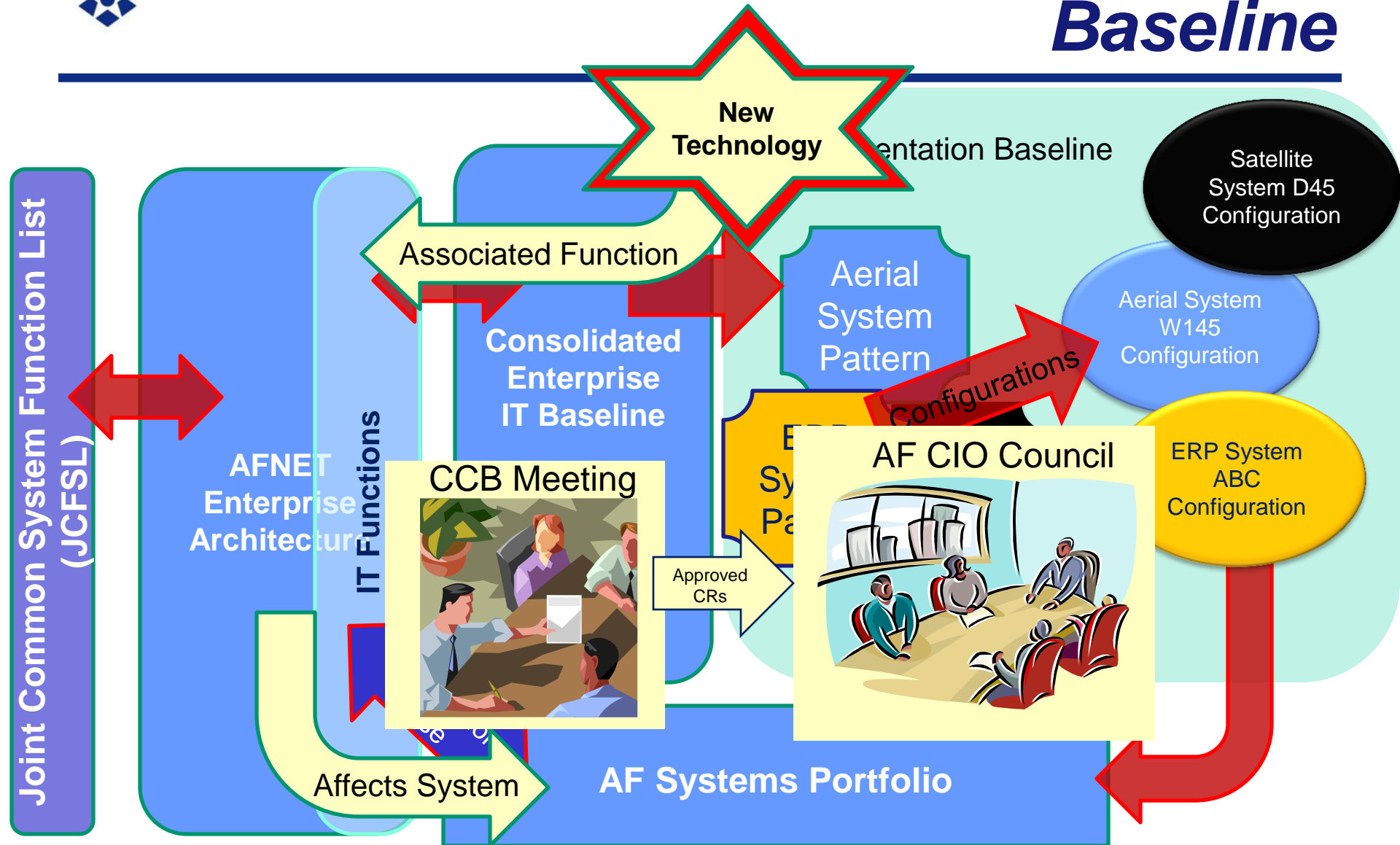
Baseline Relationships*



* Guidance Memorandum AFPD33-4_AFGM33-01



Manage Changes to Target Baseline





Questions

