



NATIONAL RECONNAISSANCE OFFICE

(U) Leading NRO IT in Today's Changing Financial Climate

Briefing to the Ground Systems Architecture Workshop
28 February 2012

Jill T. Singer, NRO CIO

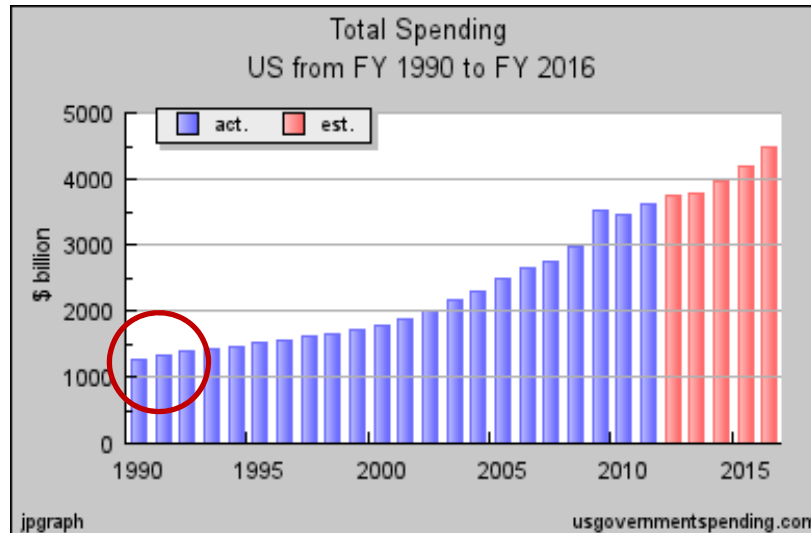


VIGILANCE FROM ABOVE

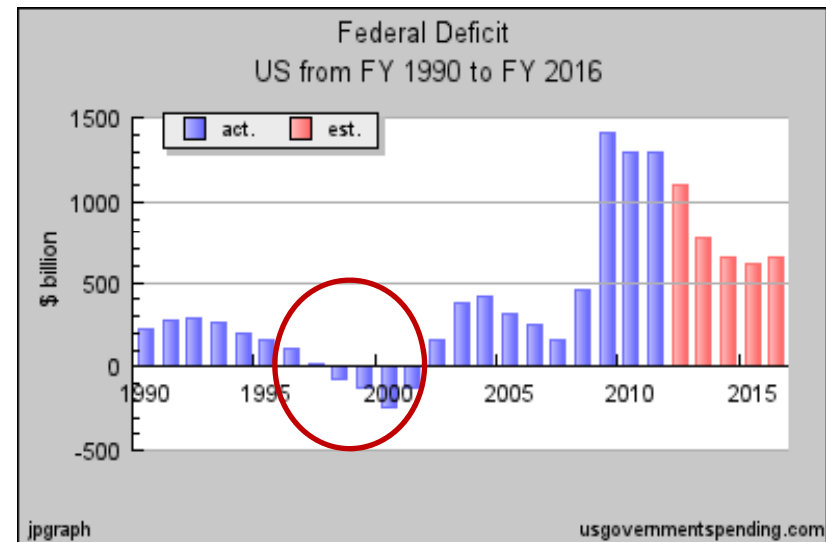
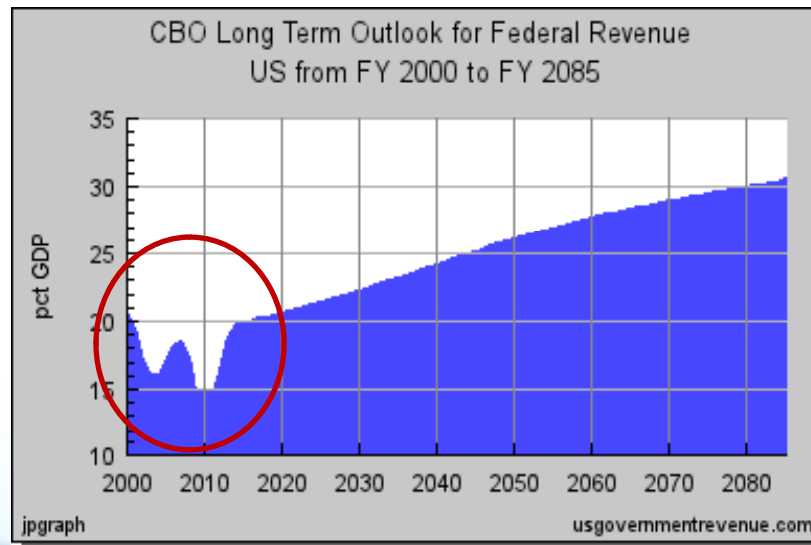
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Debt Reduction: Today's Peace Dividend



- Our Nation is on a fiscal path that looks unsustainable.
- Federal agencies required to contribute to the solution.
- For the Intelligence Community, it “feels” like déjà vu: the Peace Dividend of the 1990s.





The IC Mission Remains the Same

- + IC value to the nation is “left of boom” via the Intelligence Lifecycle.



The Intelligence Lifecycle

Mission imperative: Can the IC accomplish the mission faster, better, cheaper, and safer?



DNI, DNRO, and IC CIO Remarks at GEOINT 2011



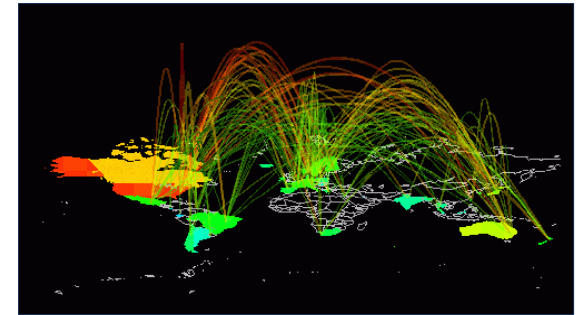
- + Current Landscape
 - + Increasing complexity of IT – cyber
 - + Accelerating pace of IT – cloud
 - + Shrinking IT budgets – Federal, DoD, and IC
- + NRO has too many D/Os doing IT
 - + Remove duplication
 - + Reduce our footprint
 - + Integrate our stovepipes
 - + Make it easier to do our mission
- + New IT Operating Model for IC
 - + IC Enterprise model
 - + Agency unique mission components remain
 - + "Big 5" IC elements will lead, others will join later"



IC IT Enterprise (ICITE)

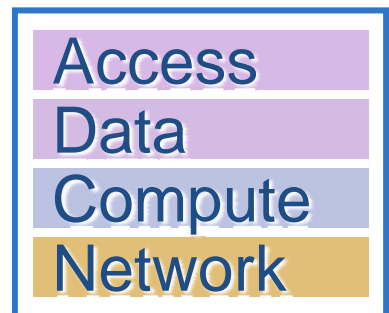
DNI Vision

Enable greater IC integration, information sharing and safeguarding through a new common IC IT architecture that substantially reduces costs.



Key Principles

- Every agency buys into an enduring program.
- Mission comes first with recognition of a cost/value threshold.
- Do in common what's commonly done.
- Maximize existing efforts.
- Enhance security.
- Work within existing statutory framework.





IC IT: Current and Future

Current IT Posture

Agency-based IT

Each IC element plans and executes its own IT with limited IC awareness.

Stove-piped IT Portfolio Management

Local, agency decisions made with limited IC information and insight.

Agency-Centric IT Acquisition

Each agency acquires IT (SW, HW, and services) independent of each other and direct from vendors and service providers.

Future IT Posture

Integrated, Services-based IT

Ten common service offerings across the IC for primary IT functions.

IC-Level IT Portfolio Management

IT decisions made by set of highly informed IT leaders across enterprise.

Enhanced IC Enterprise IT Acquisition

Centralized and synchronized IT acquisition lifecycle enabling greater innovation, stronger buying power, and progressive methods (SOA, agile).

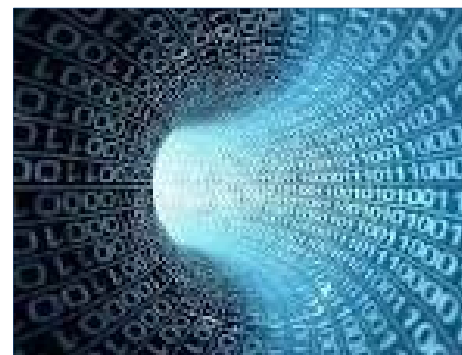
Independent — Federated — Integrated →





Recent DNI Decisions on ICITE

- † Programmatic approach
- † Governance structure
- † Services, business models and initial providers
- † Roadmap and schedule
- † Characteristics include:
 - † **Single back office**
 - † **Consolidated infrastructure**
 - † **Common services**
 - † **Thin desktop for most**
 - † **Smart data**
 - † **Cloud-based**
 - † **“Widgetized” applications**





ICITE Programmatic Approach

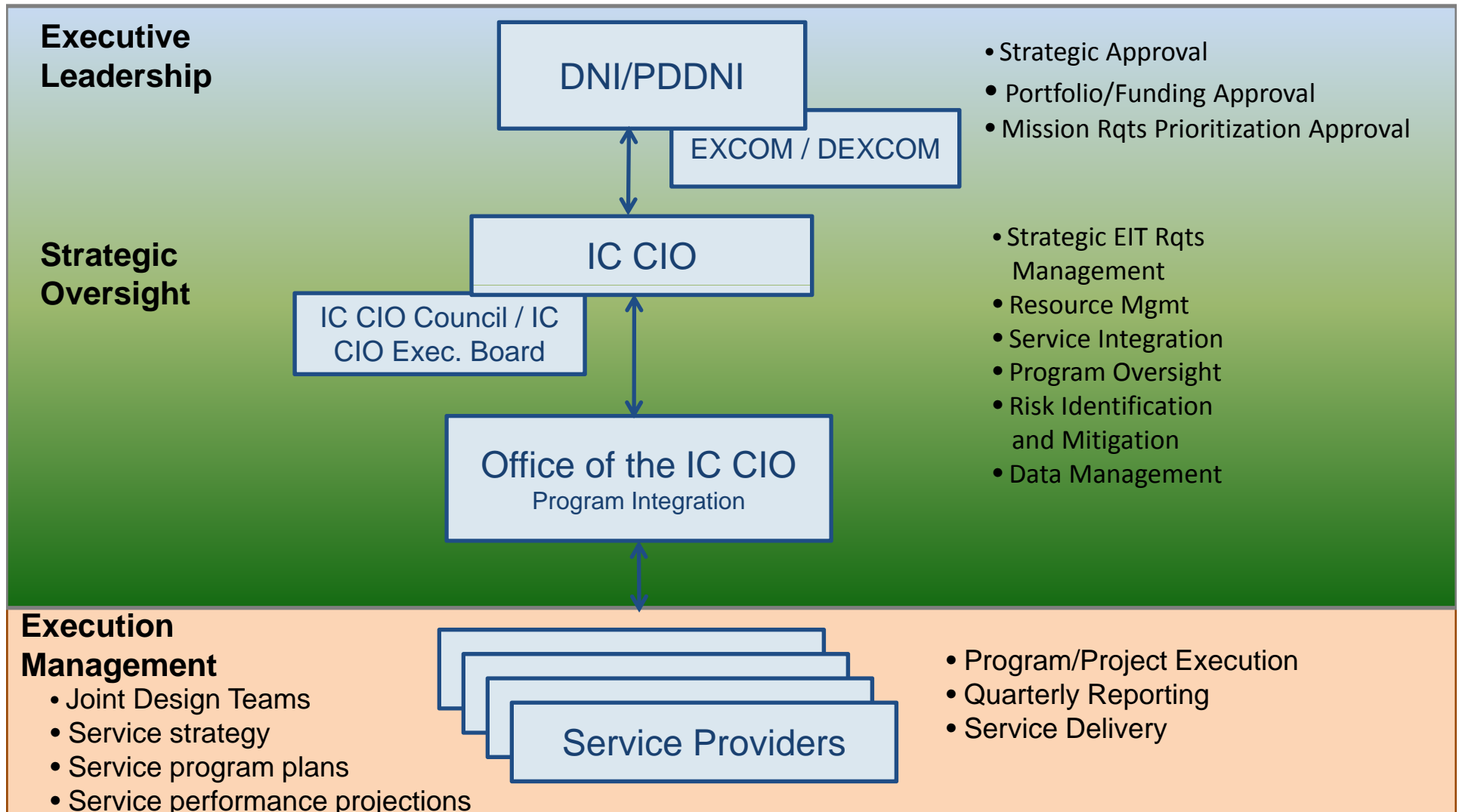
IC CIO oversees the overall program and integration

	FY12	FY13	FY14	FY15	FY16+
Leadership	Standards	Accelerate Standards development & Approval process (weeks, not months)			
	Policies	Resolve Key Policy Issues:			
	Oversight	Establish IC Oversight Process	Validate Program	Validate Program	Validate Program
Resources	Budget/Acquisition	Identify & Protect Investment Pools	Synchronize FY13-14 CBJB& CIG with IT Efficiency program	Employ Rapid/Agile Enterprise Acquisitions	
	People	Establish Joint engineering teams	IT Workforce Skills Assessment		
Mission	Mission	5 year target with 1 year roadmaps and 3 month spins			
	Applications				
IT Infrastructure	IC Desktop Environment	5 year target with 1 year roadmaps and 3 month spins			
	Smart Data				
	Integrated Audit				
	Identity & Access Management				
	Compute & Storage Infrastructure				
	Consolidated Network				

5 year target with 1 year roadmaps and 3 month spins

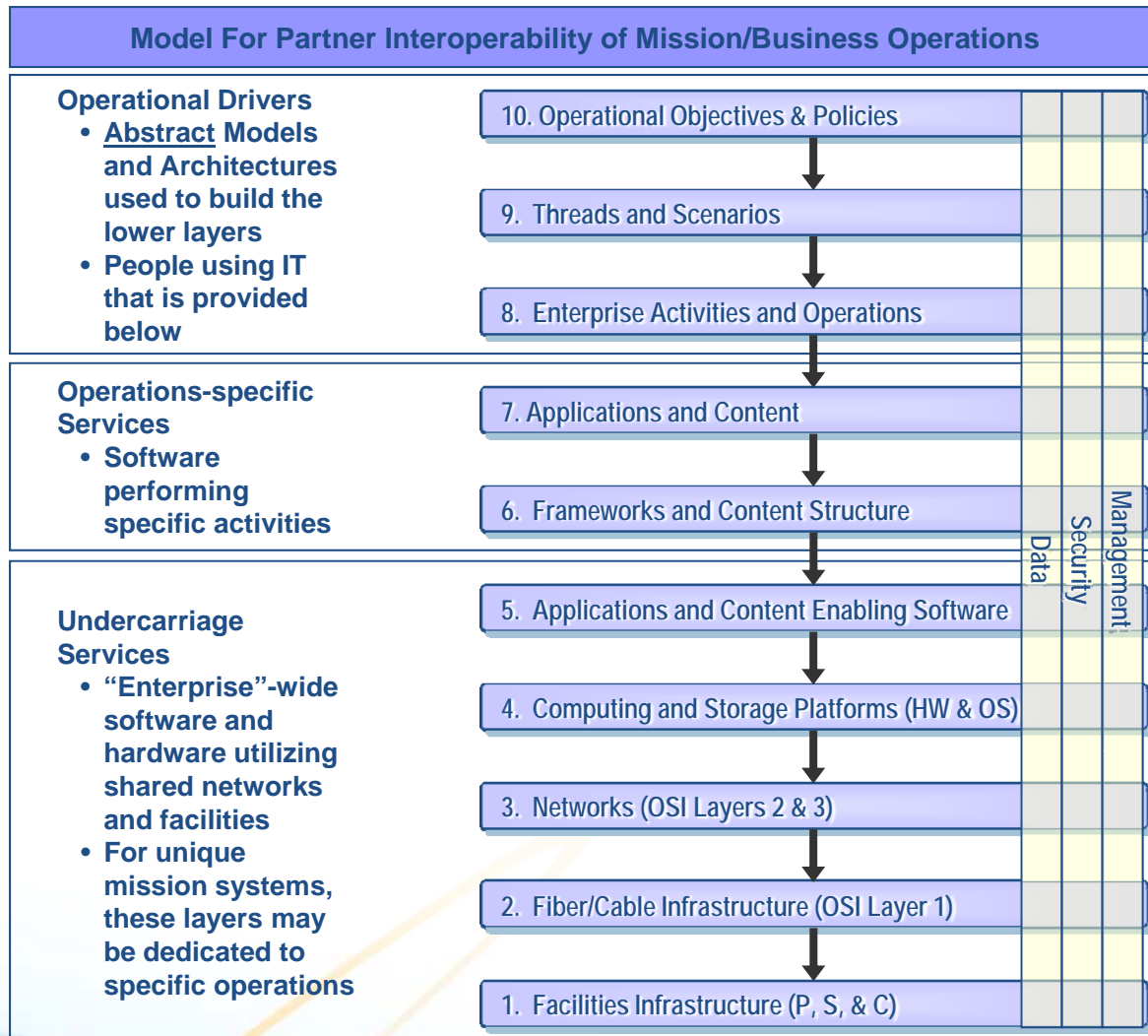


ICITE Governance Structure





Initial ICITE Services



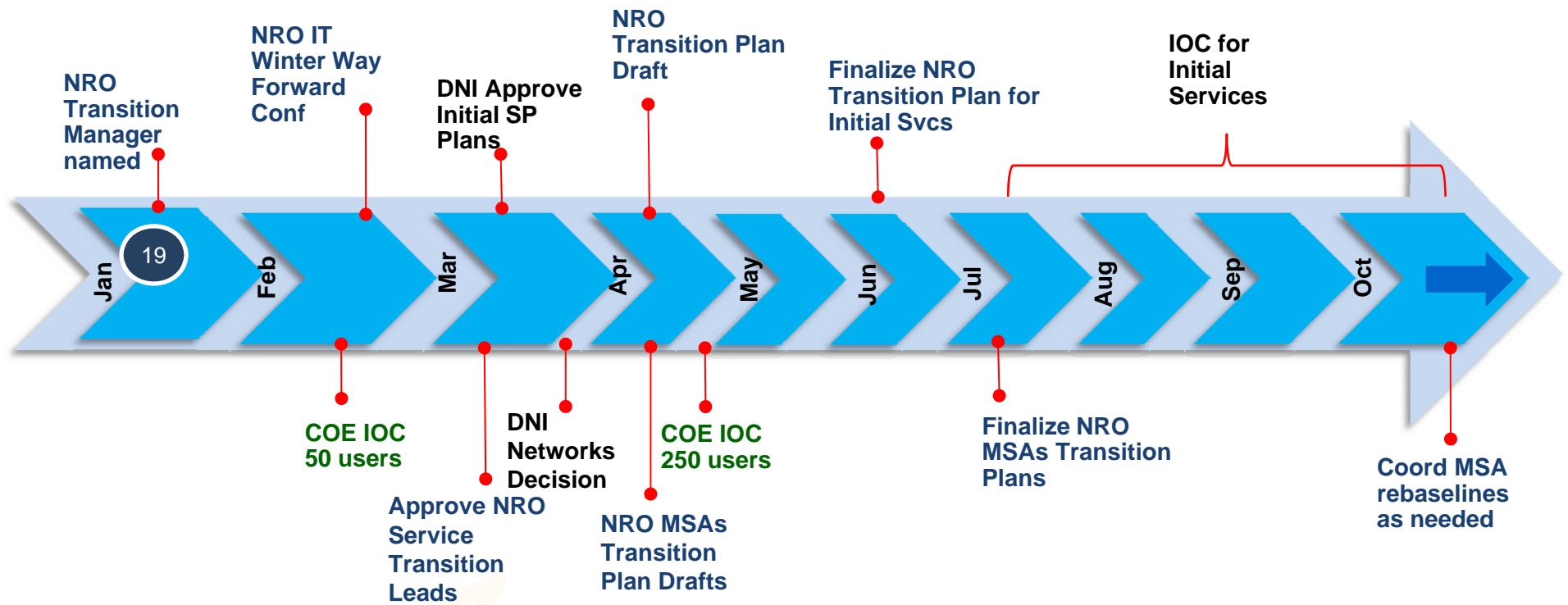
ICITE Services (providers)

1. Enterprise Management
2. **Apps Stores (all)**
3. Apps Dev
4. **Apps Mall (NSA)**
5. Identity Access/Authorization
6. **Desktop Environment (DIA-NGA Team)**
7. **Clouds (NSA, CIA)**
8. Campus Networks
9. Red Core
10. Black Transport

Note – Services in bold awarded, remaining services to be “bid” in FY2012.



CY2012 NRO Migration Schedule - Tactical





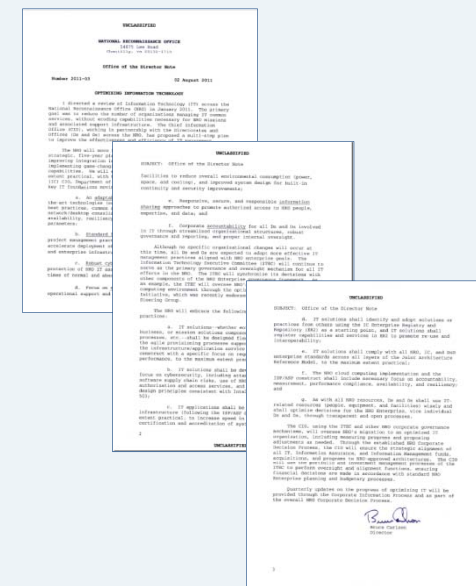
DNRO Optimizing IT Memo – 2 Aug

The NRO will move forward smartly to optimize IT on a strategic five-year plan centered on driving IT efficiencies, improving integration in support of QUAD initiatives, implementing game-changing technologies, and safeguarding our IT capabilities. We will ensure our IT is aligned with the direction of the IC CIO, the DOD CIO, and the Federal CIO.

The key IT foundations moving forward are:

- + Adaptable IT Infrastructure
- + Standard IT Implementations
- + Robust Cyber Security
- + Resource Efficiencies
- + Responsive Info Sharing
- + Corporate Accountability

DNRO Optimizing IT Memo

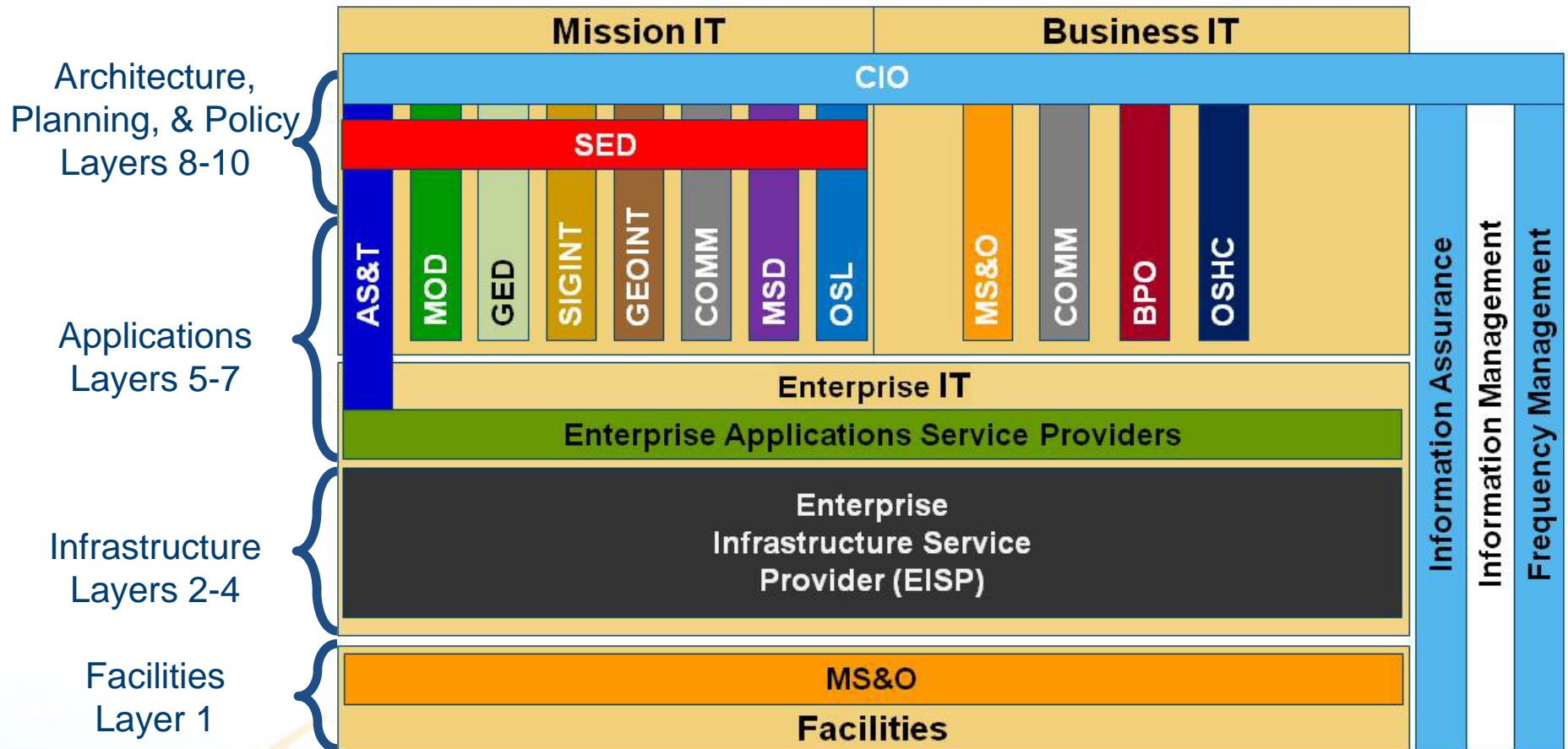




EISP – Foundational Part of Solution

JARM

Optimized NRO IT Structure*



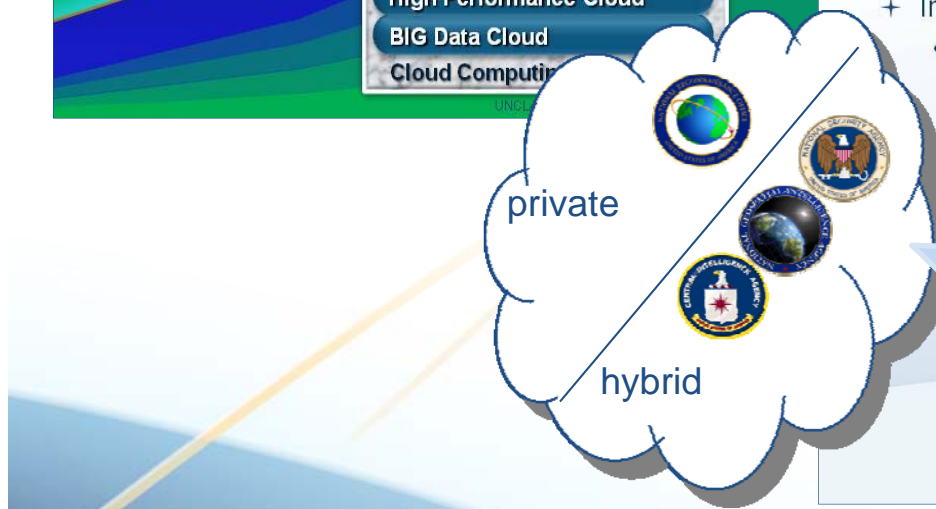
*Representative, Not Exhaustive



Migrating NRO to the Cloud – Green Field



Green Field Implementation and Cloud Strategy included an NRO private cloud and an IC cloud.



NRO Cloud Strategy

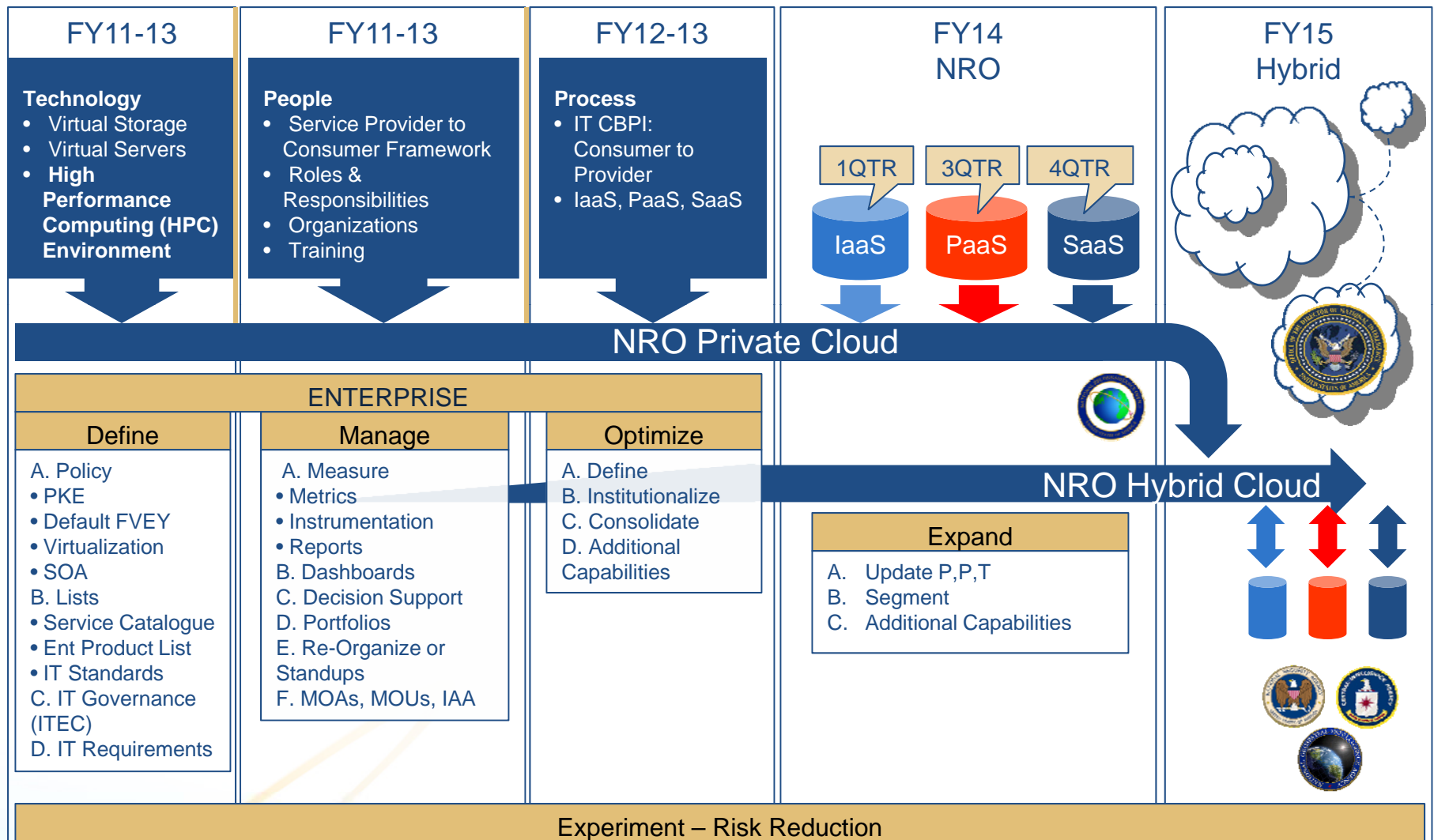
- + NRO IT strategy and roadmap developed over the past 18 months
- + Cloud delivery model: private first, then hybrid (private/community)
- + Service types: IAAS and PAAS first, then SAAS
- + Implementation and Migration Approach: phased revolutionary
 - Test it, Prove it, Use it, Exploit it

NRO CLOUD ENVIRONMENT			
Access	Service	Management	Acquisition
2 Clouds	+ Software + Platform + Infrastructure + Single Enterprise Infrastructure Service Provider (EISP)	Service Provider to Consumer Framework + Roles & Responsibilities + Organizations + Processes + Multiple Mission and Business Application Providers (ASPs)	+ High Performance Computing (HPC) + Virtual Servers and Storage (VSS)
		Data Center Clustering Strategy + 3 Enclaves: Unclassified, S, TS + 3 Clusters + Business Admin Shared Enterprise (BASE) + R&D Test Environment + Mission Operations	Data Center Locations + Primary + Alternate

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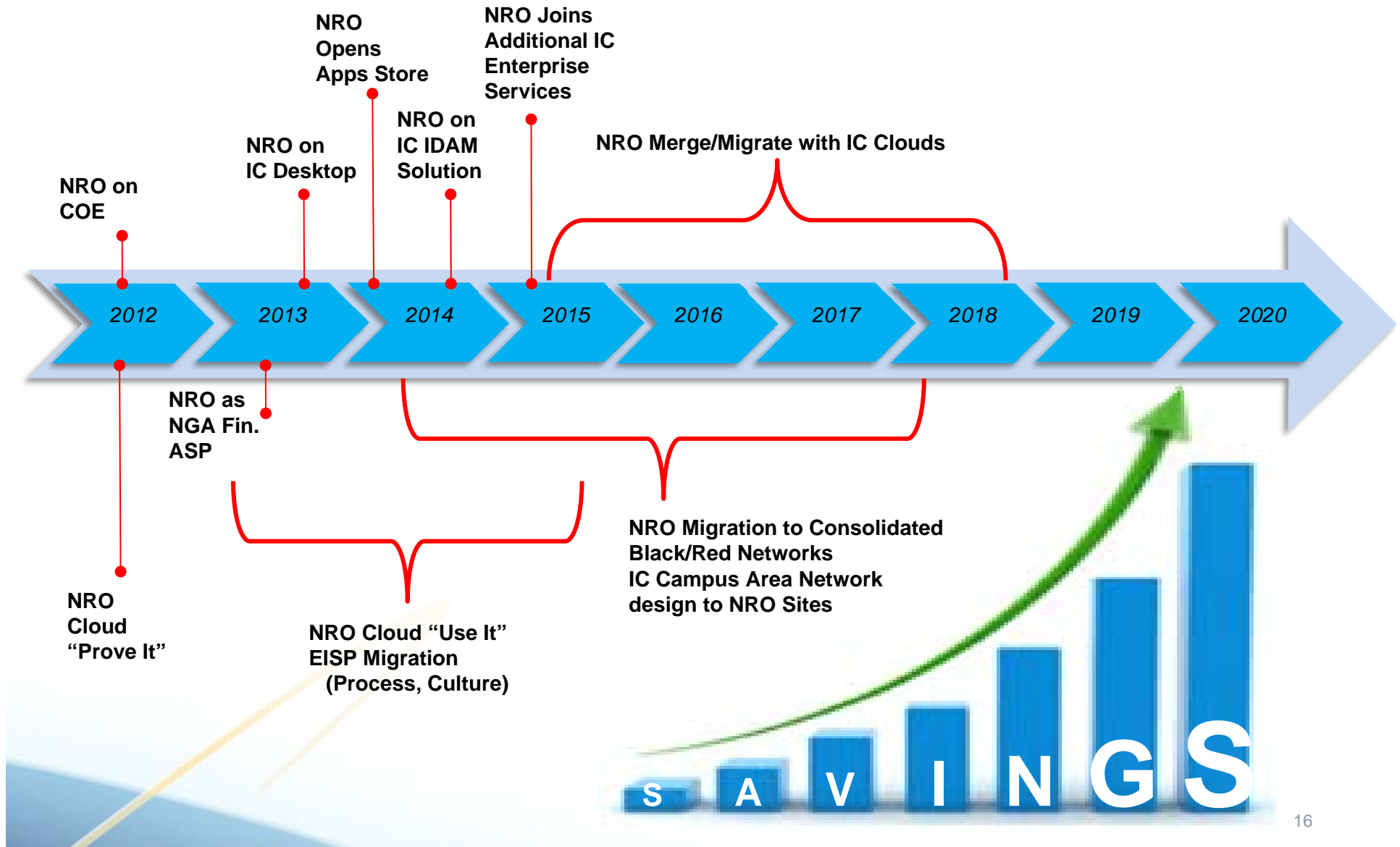
Merging Into the ICITE Clouds



Crawl, Walk, Run, Sprint...while watching your step



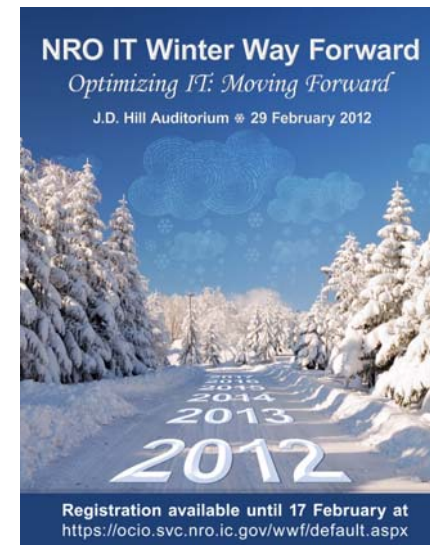
Tentative NRO Multi-Year Migration - Strategic





Summary

- + Our world is changing.
- + The mission remains the same.
- + Our leadership recognizes IT as key to solution – ICITE.
- + NRO IT already on efficiency path – Optimizing IT.
- + We need to mature, migrate, and merge into the clouds.
 - + My perspective on cloud: <http://jillsinger.sys-con.com/>.
- + Need everyone's help for success.
- + ONE TEAM even more important!!





NATIONAL RECONNAISSANCE OFFICE

VIGILANCE FROM ABOVE

