SCARS Overview

Lt Col Jeff Zdenek

AFLCMC/WNS

(937) 656-8043

Jeffrey.zdenek@us.af.mil

8 May 18

Disclaimer: The information provided herein represents the Government's best understanding of the procurement as of the presentation date. This information should be considered preliminary and subject to change.

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Purpose

- Overview of SCARS
- What SCARS means to industry

SCARS is a sustainment initiative to incrementally establish a common open-systems architecture for Air Force simulators in order to improve cyber resilience, responsiveness, and minimize life cycle costs

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

AFLCMC/WNS Training Systems Background

- Over 50 platforms supporting 9 MAJCOMs spanning Active, Guard & Reserve in Air & SOF domains
- More than 2,380 training devices, broad technical spectrum, world-wide locations – common functions
  - Multiple types of devices and configurations
  - Procured by-platform over decades to meet individual operational training requirements
- Multiple program obsolescence states
  - Hardware obsolescence, software end-of-life and cyber solutions currently addressed by each training system platform
- Most programs in sustainment

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS Overview

- **Sustainment Initiative** – brings enterprise management across training systems portfolio
  - Interoperability capability covered by Distributed Mission Operation (DMO) program
  - Blended capability covered by Live-Virtual-Constructive (LVC) program
  - MAJCOM training requirements still supported by specific platform devices – just in a smarter approach
- **Incremental** – Annual release of common standards
  - Improves speed of implementation while reducing program risk
  - Generates opportunities for innovation and on-going ability to incorporate new technology
  - Adaptable to fiscal environment and platform specific challenges
- **Common, open systems architecture** – executes DoD Modular Open Systems Approach (MOSA)
  - Moves away from vendor lock and increases re-use across multiple platform Sims
  - Future increments implemented quicker at reduced cost for the enterprise
- **Improve cyber resilience** – adds common control provider for enterprise wide RMF controls – faster ATOs
- **Improve responsiveness** – defined interfaces aid modification updates; improves cyber response time; generates opportunities for quick deployment of common capabilities including databases
- **Minimize life-cycle costs** – synergy between MOSA and centralized functions minimizes sustainment costs in an increasingly demanding cyber environment

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS Value Added to OTI Training Systems

OTI Before SCARS

- Individual ad hoc security baselines
- 50+ different configurations to implement LVC
- Outdated threat signatures and constructive models on some sims events
- Concurrency completely reliant on MAJCOM investment in specific devices
- Labor intensive RMF review/oversight

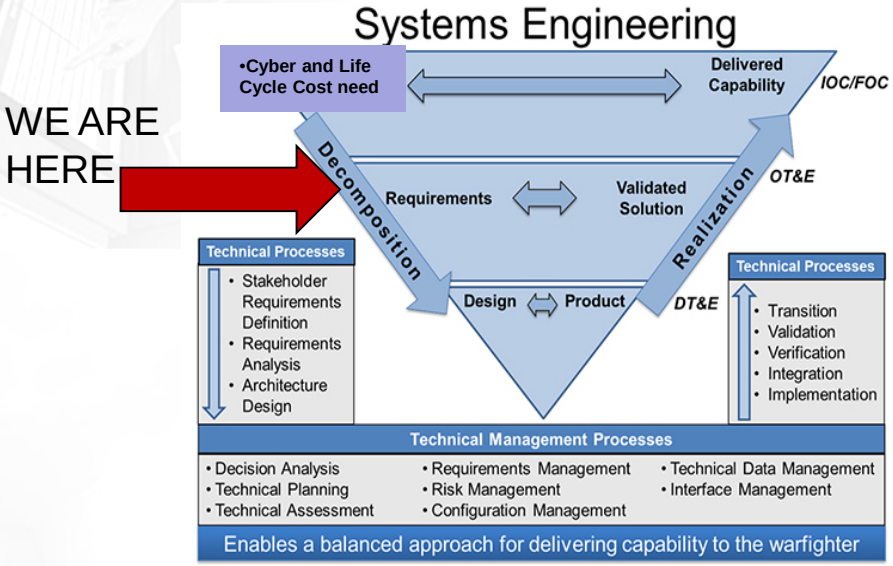
OTI After SCARS

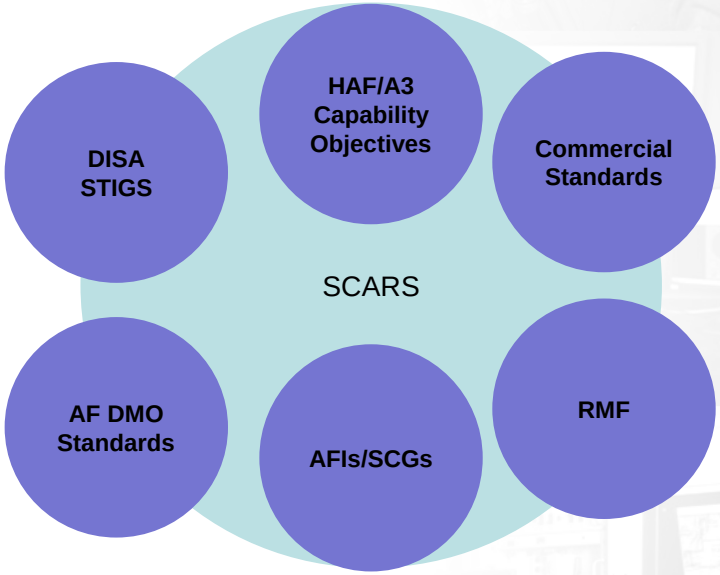
- Well known standardized security baseline
- Common configurations to make LVC implementation easier
- Common mission rehearsal baseline (same threat signatures and constructive models)
- Increased MAJCOMs leverage of enterprise investments (NGTS, Intrusion protection)
- Focused RMF review/oversight on specific risks and unique functions

SCARS enables the future of OTI

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Requirements and Standards



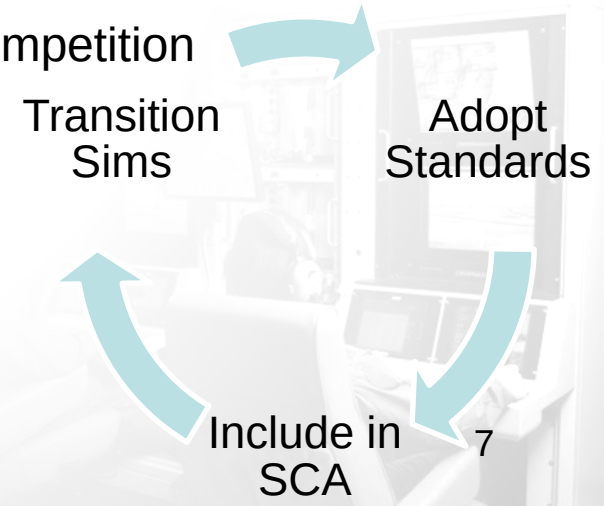


The Simulator Enterprise is between Weapon Systems and IT enterprise systems

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS On-going Approach

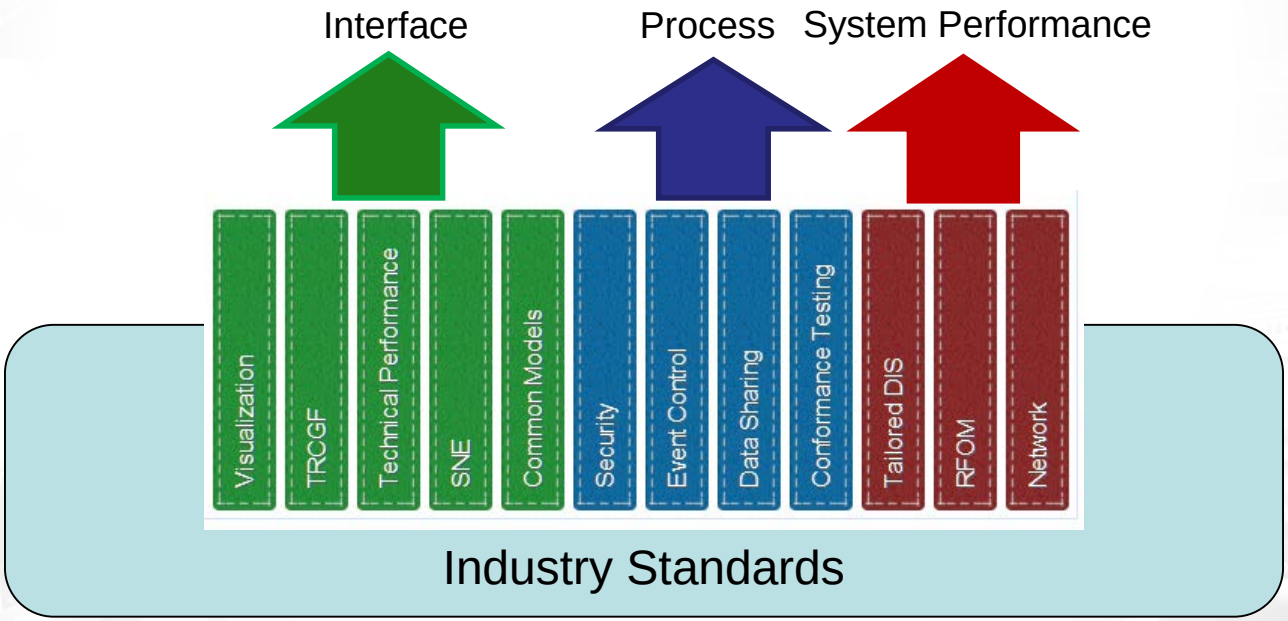
- Adopt enterprise standards using the USAF Standards Maintenance Process
- Define and employ a Simulator Common Architecture (SCA)
  - Utilizes both common and open standards
  - Simulator specific implementation of Modular Open Systems Approach
  - Includes both on premise and centralized functions
- Transition current Sims to the SCA using several methods:
  - Incremental mods to training devices
  - Leverage Training System support contract re-competition
  - Recapitalize/Re-host training system



Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Standard Categories (DMO Example)

- Adopt industry standard, extend industry standard, and/or define new standard



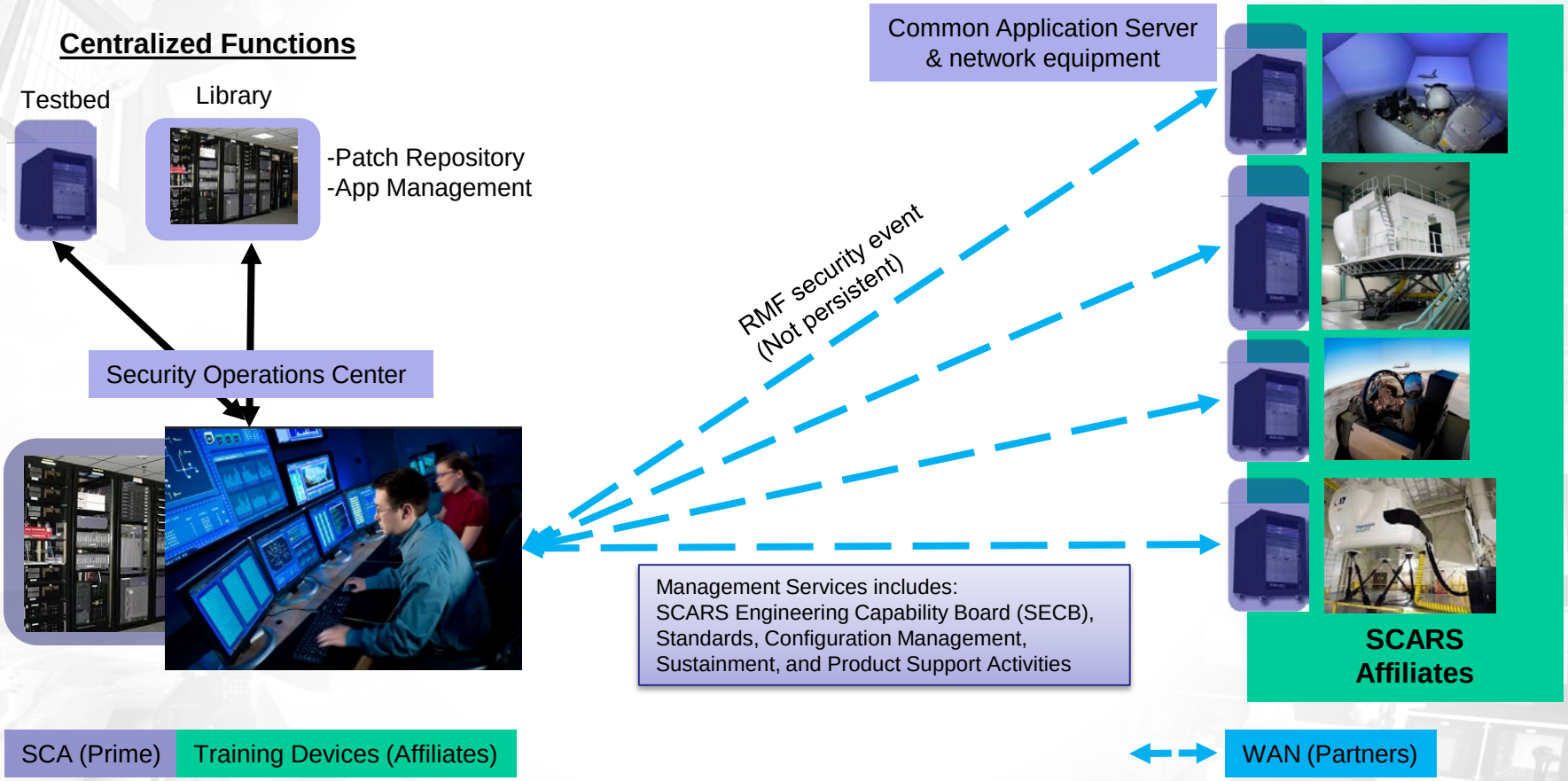
Cleared for Public Release 3 May 18 (88ABW-2018-2289)

1st Standard: Remote Scanning SCARS Mission Package 17 (SMP17)

- Why Remote Scanning?
  - Important RMF control not easily implemented on individual training systems
  - Current Black Team scanning limited, not realistically scalable across enterprise
    - May require ISSM to travel on-site to conduct scans (not responsive)
    - Requires connecting laptop to individual devices (time & manpower intensive)
  - Standard well defined (ACAS scanning software)
  - Challenging but achievable in near term
  - Encompasses span of SCARS functionality
- Required functions
  - On premise hardware and software to conduct scans
  - Centralized control to initiate scans
  - Centralized storage and analysis of results
  - Network to connect on premise and centralized functions

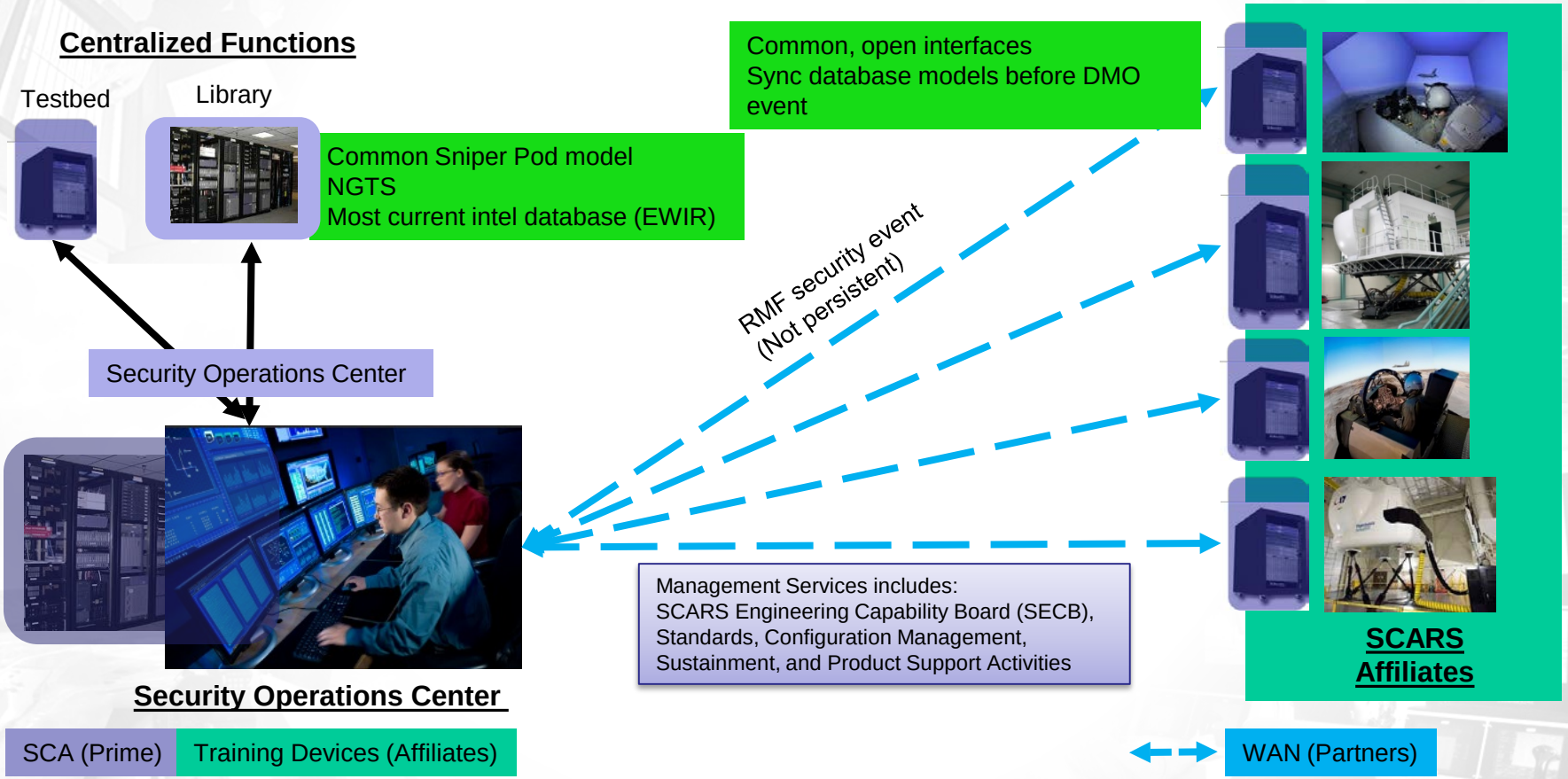
Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS End State
Simulator Common Architecture (SCA)



Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS End State
Example Future MOSA Enabled Functionality



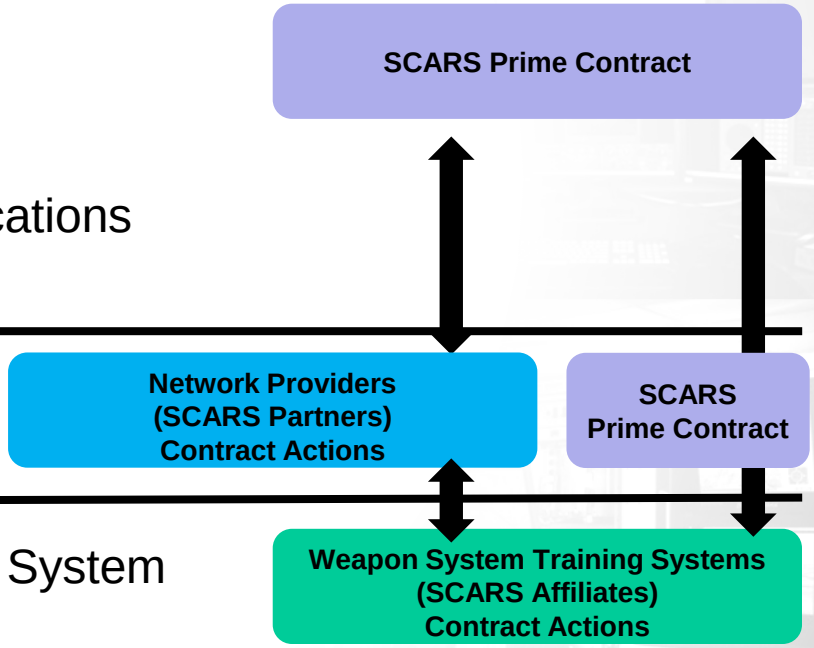
Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS Tasks

- Simulator Common Architecture (SCA) – define common solutions (standards)
- Security Operations Center (SOC)
  - Remote scanning
  - Remote updates
  - Support to Affiliates and Partners
- Library – access to standards and applications
- Management services

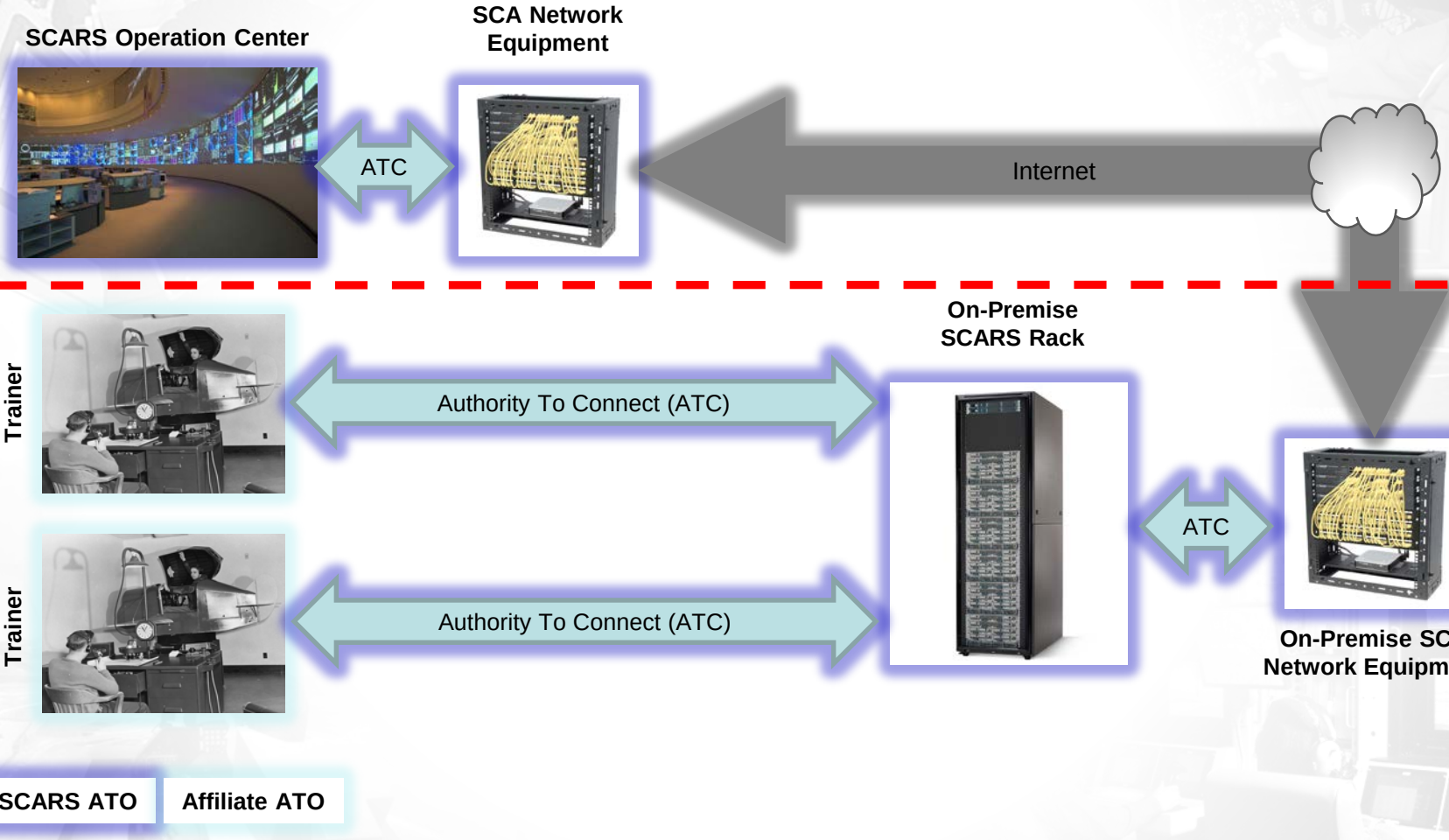
- Leverage existing WAN or create SCARS WAN

- Implement via Weapon System Training System contract actions
  - Enables consistent cyber and obsolescence response



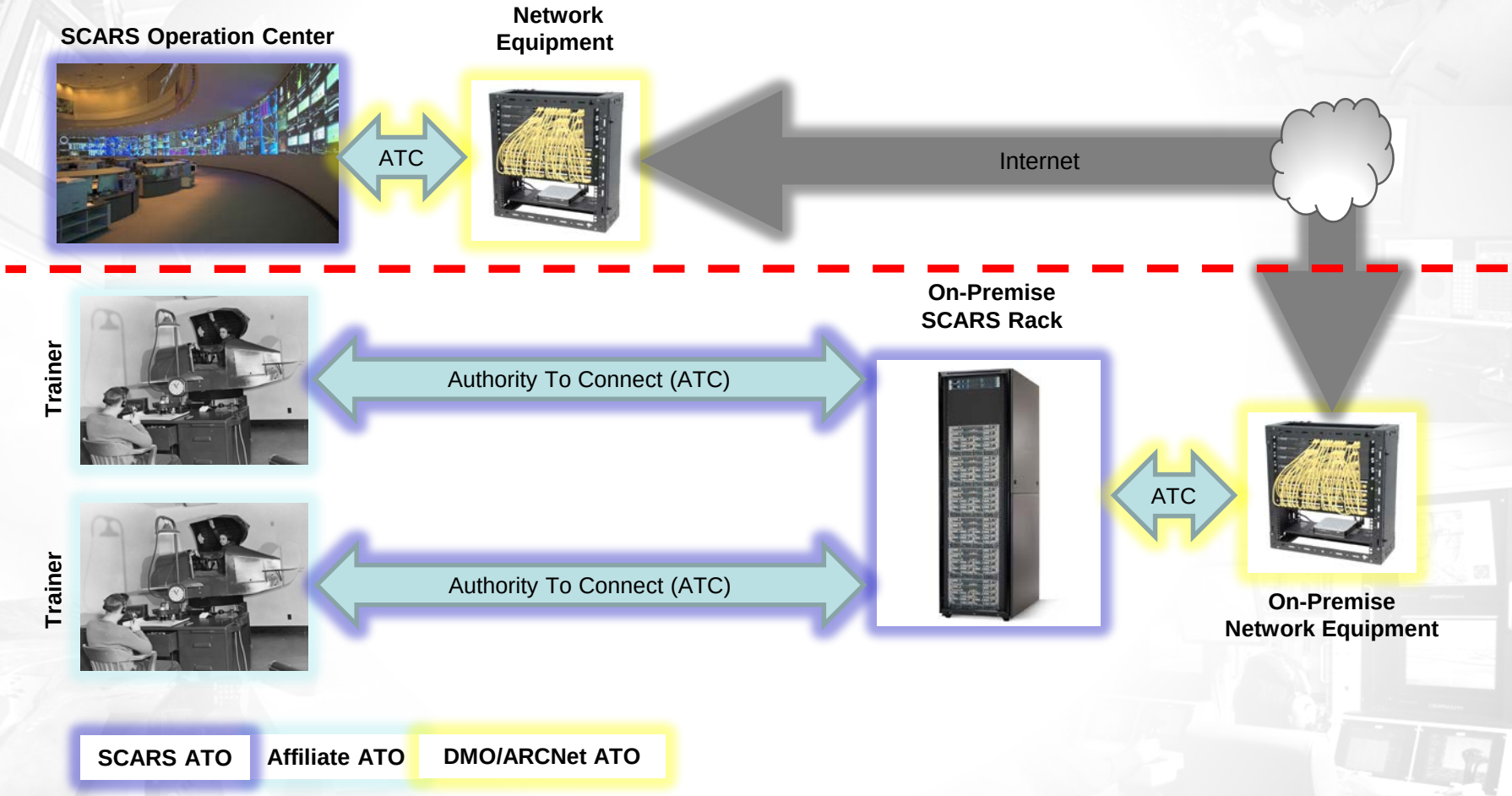
Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS High Level End State - No Existing Network



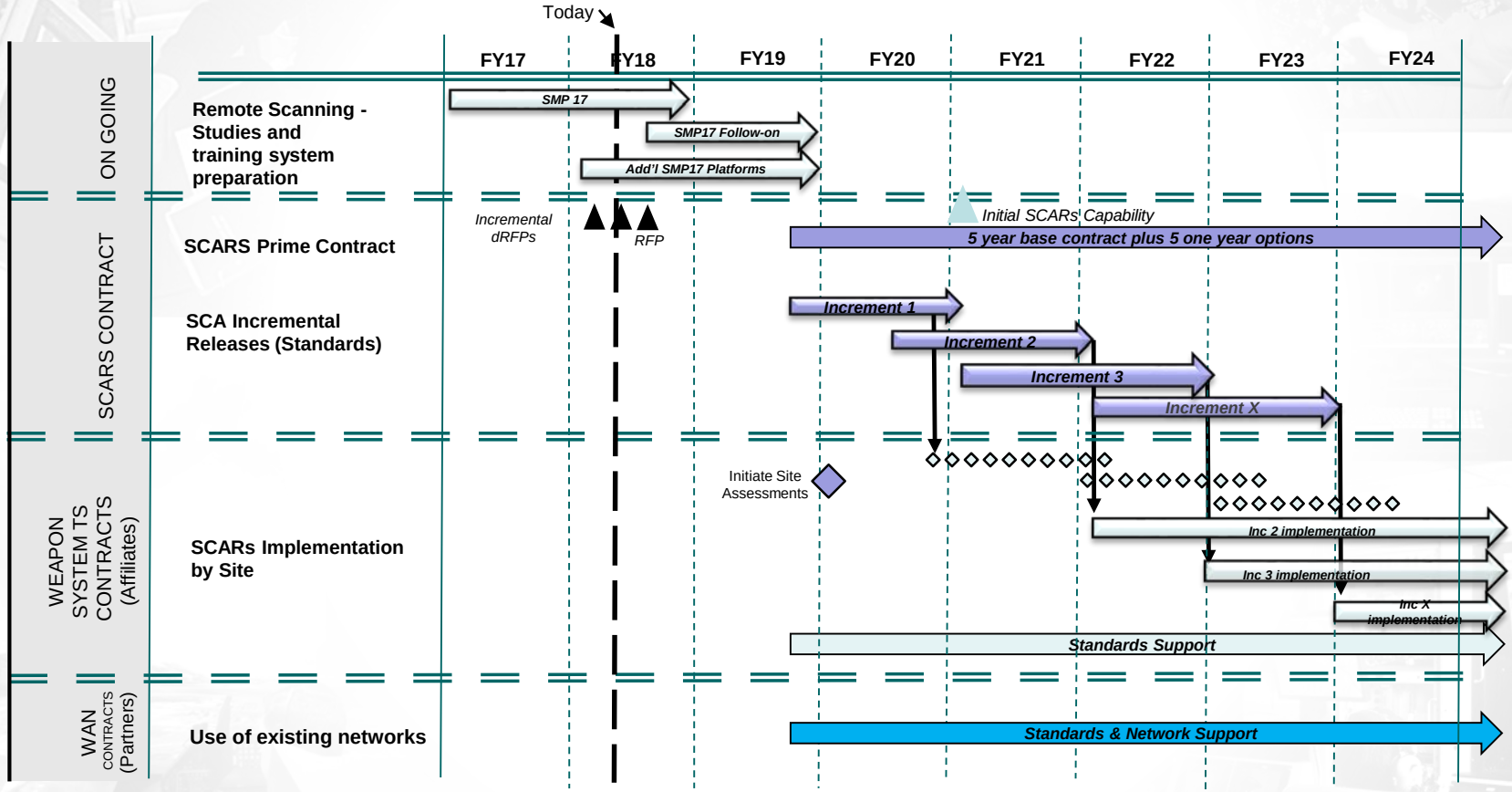
Cleared for Public Release 3 May 18 (88ABW-2018-2289)

SCARS High Level End State - Existing Network (DMO/ARCNet)



Cleared for Public Release 3 May 18 (88ABW-2018-2289)

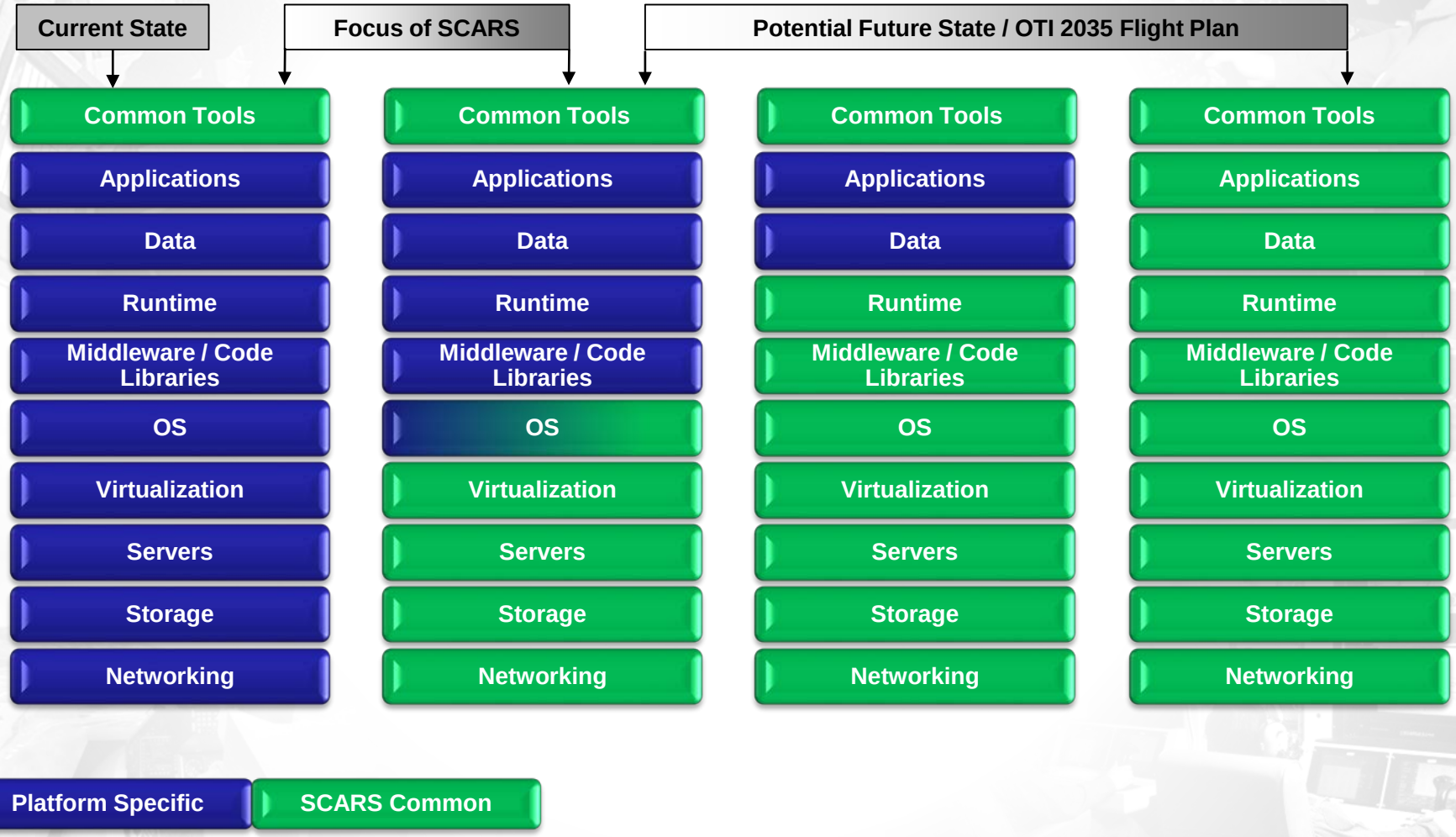
SCARS Draft Roadmap



SCARS Prime Contractor | **Training System Affiliates** | **Network Partners**

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Journey to Commonality



Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Opportunities for Industry

- Prime contract (search “SCARS” on FedBizOps)
  - Gov ROM for prime contract only:
    - $200-300M over 5 years
    - $700-900M over 10 years
- Training system contracts:
  - MOSA & SCARS standards will be increasingly important
  - On-going requirement to support SCARS establish standards (similar to DMO)
- Other – common tools, databases, applications

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Prime Contract Updates

- Continuing to refine Performance Work Statement (PWS)
  - Split out PWS & System Requirements Document
  - Clarified role as common control provider/cyber security service provider
  - Clarified assistance to SCARS affiliates & partners
  - Expanded Model Based System Engineering (MBSE) and Modular Open System Approach (MOSA)
- SOC location:
  - Require contractor location at start of contract
  - Transition to Gov facility (notionally Orlando) in year 3 (move included in Total Evaluated Price)

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Prime Contract Way Forward

- Section L&M
- Password protected Bidder's Library
- 7,9,10,11 May – Industry One-on-Ones
- Aug - Formal RFP
- 3Q FY19 – Contract Award

Cleared for Public Release 3 May 18 (88ABW-2018-2289)

Questions?

https://www.fbo.gov/index?s=opportunity&mode=form&id=4710506dc0566103a6b9205f47bf36fb&tab=core&_cview=0

Or go to https://www.fbo.gov and use keyword search for "SCARS"

Cleared for Public Release 3 May 18 (88ABW-2018-2289)