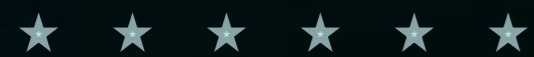


Advancing Countermeasures Architecture at TSA

Doug MacIvor
Acting Branch Manager
Countermeasures Architecture
Branch, ORCA

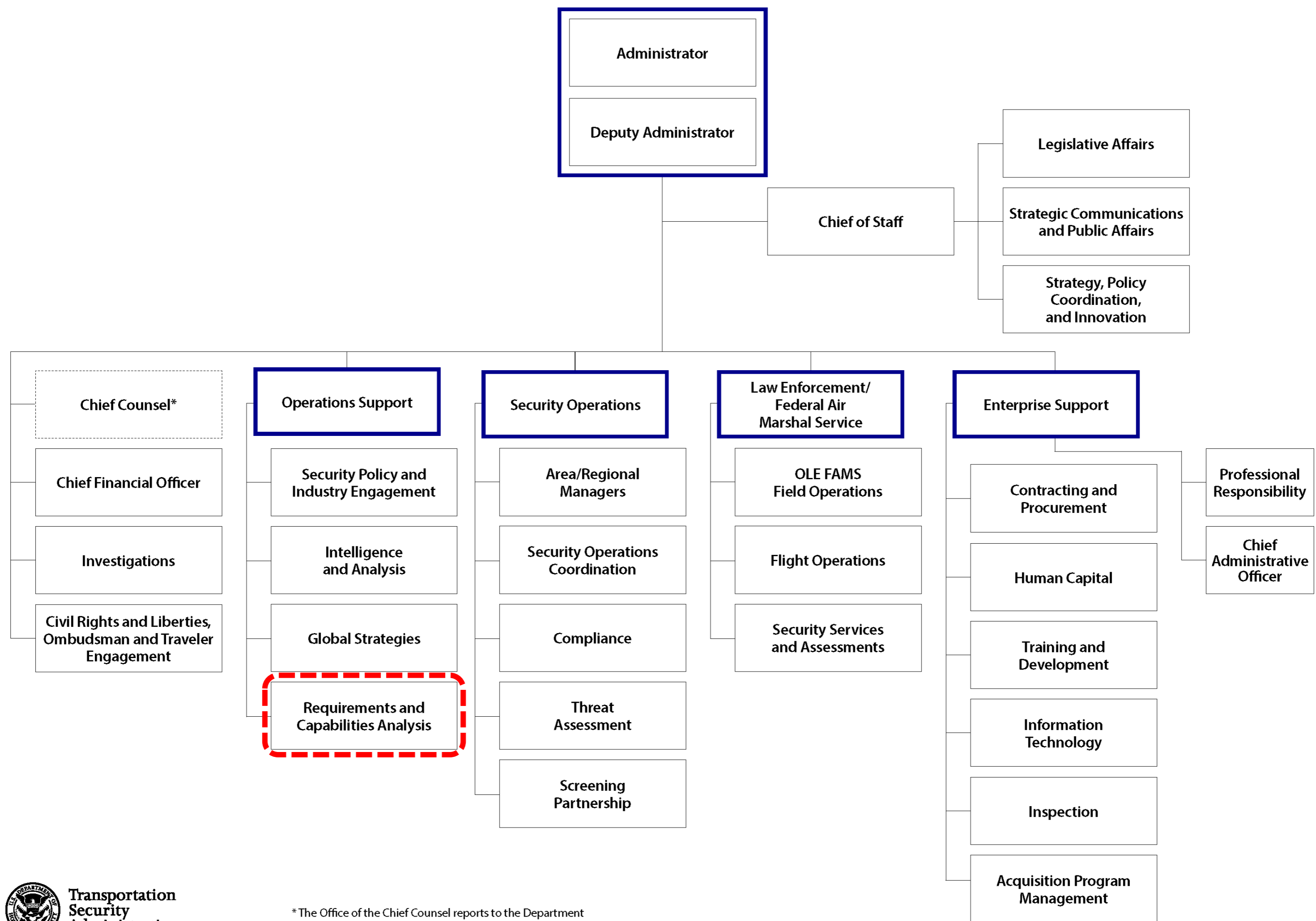


ADSA Workshop
May 15th & 16th 2018

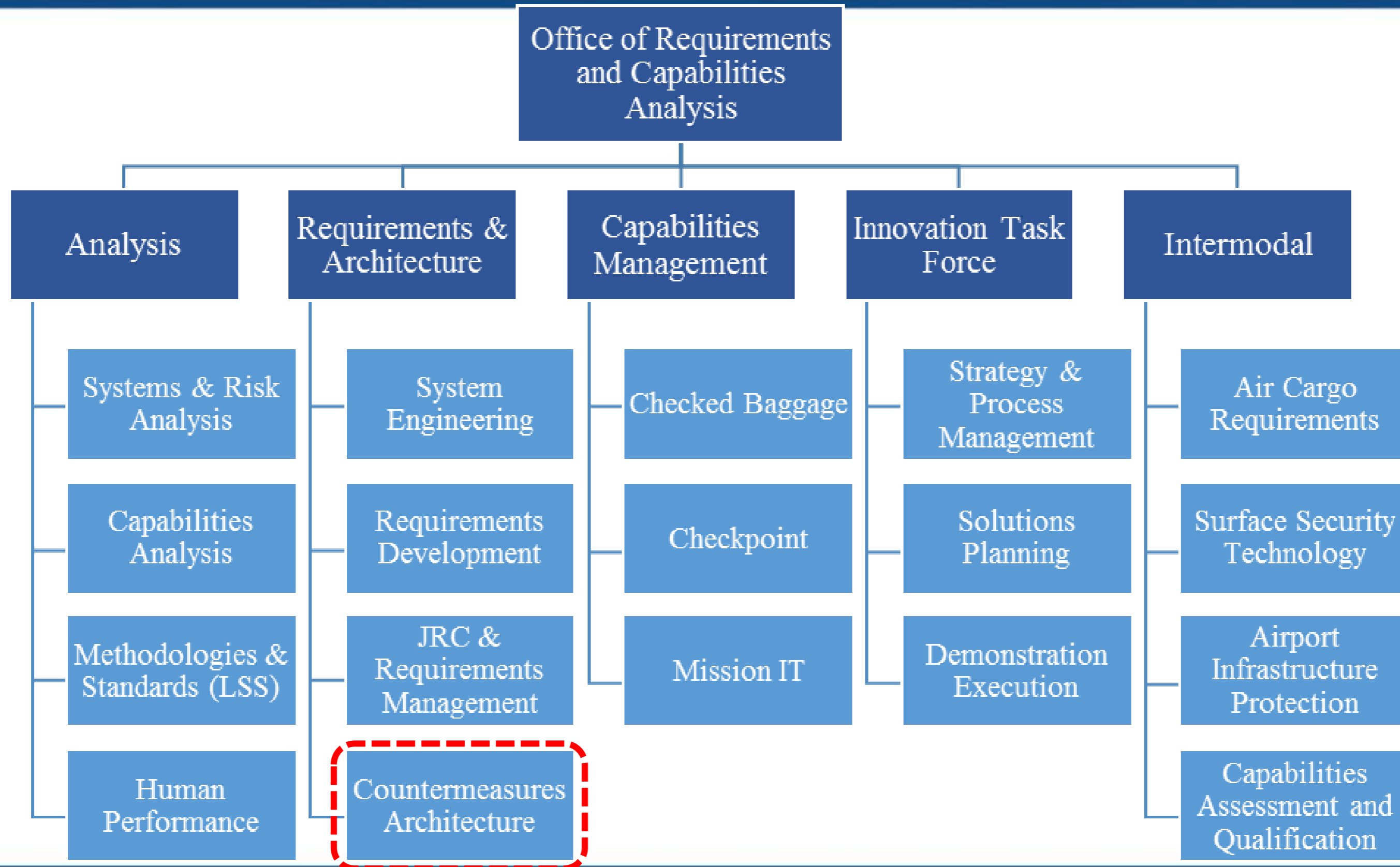


Transportation
Security
Administration





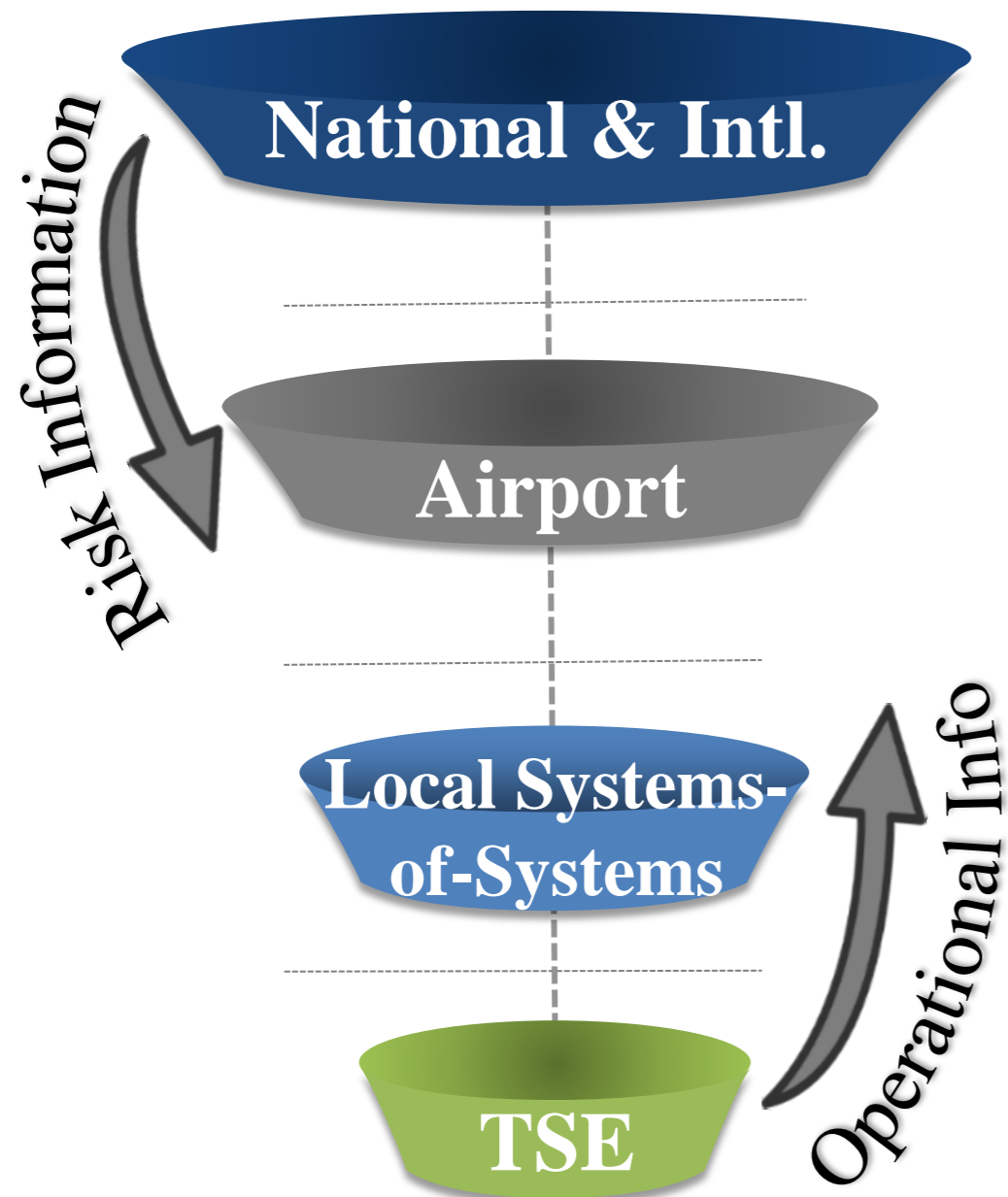
Countermeasures Architecture Branch



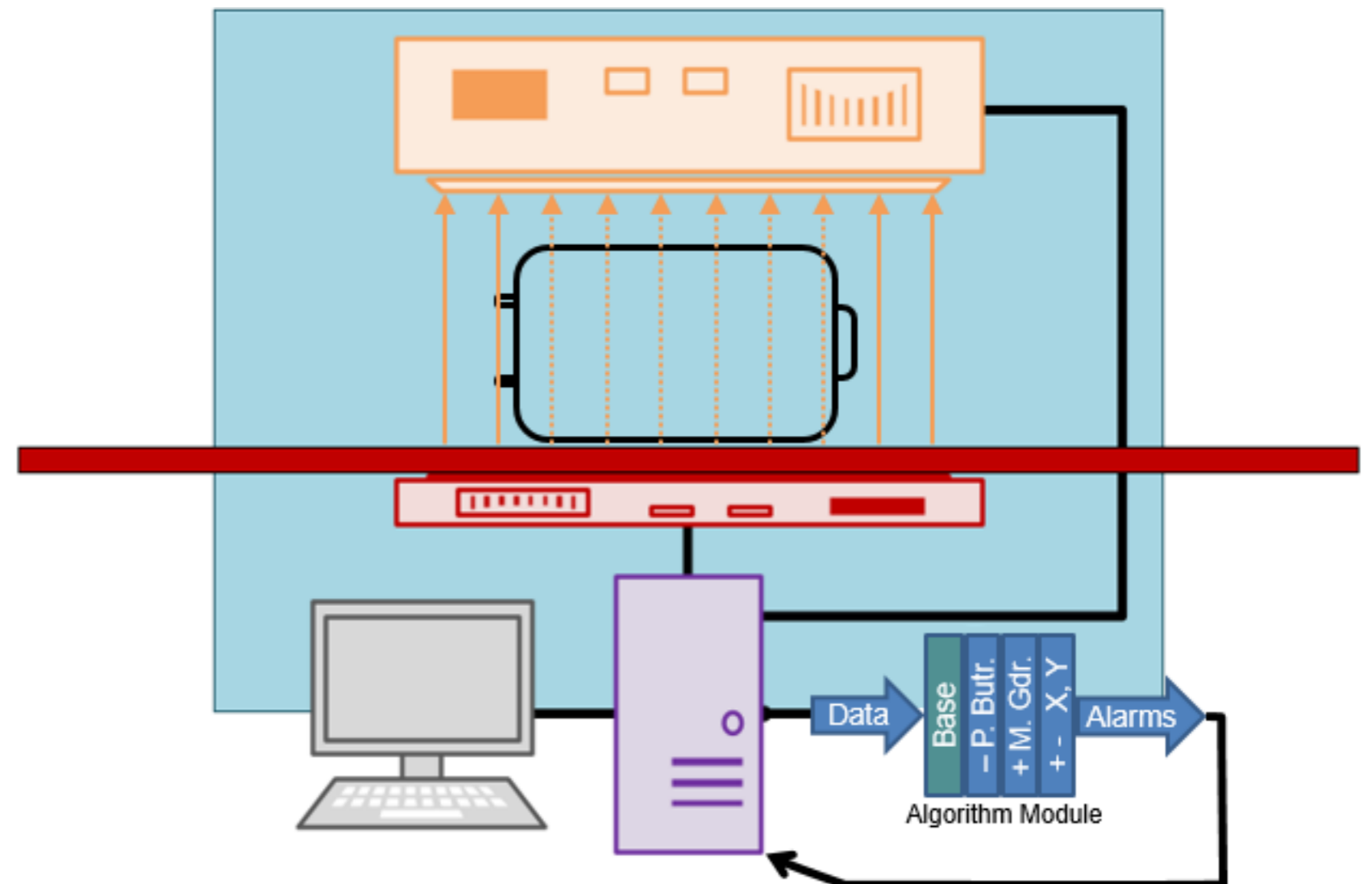
Focus Areas

Countermeasures Architecture Branch

Aviation Security Architecture



Screening Equipment Modules/Interfaces



Modular Security Example: Army MAPS

Source: Lockheed Martin / YouTube



Outcomes of Modularization at TSA



Network-enabled technologies enable **new** coordinated system-of-systems functions within airports and across the nation such as **Remote Screening**



Frequent individual module upgrades increase ease/speed to counter new threats, such as **Machine Learning** algorithms



ID traveler vetting status and adjust screening process—automatically, through new **Biometric capabilities** and networked TSE



Common GUIs: enable mixed-vendor remote screening, reduce training/logistics burdens, use best-of-breed threat rendering across vendors



Improve collection of data: screening volumes, operator performance, etc. that can be used for advanced **Data Analytics** and **Modeling & Simulation**

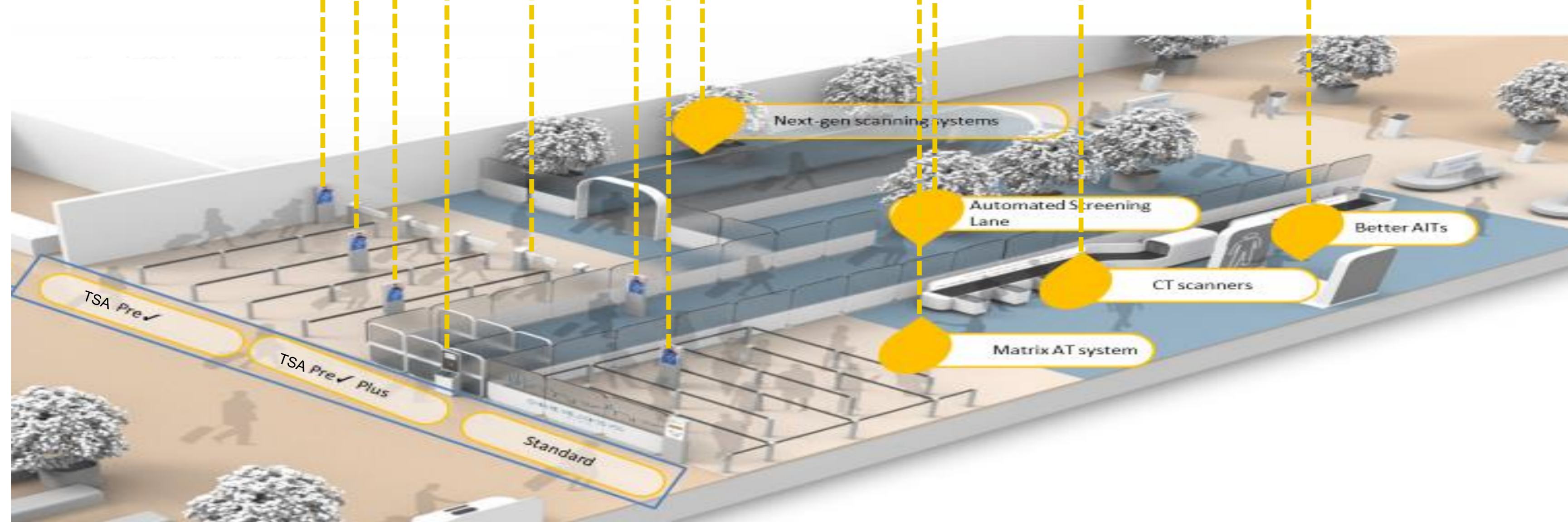
Modular Screening System Architecture (MOSSA)

Matt McGlynn

ADSA18

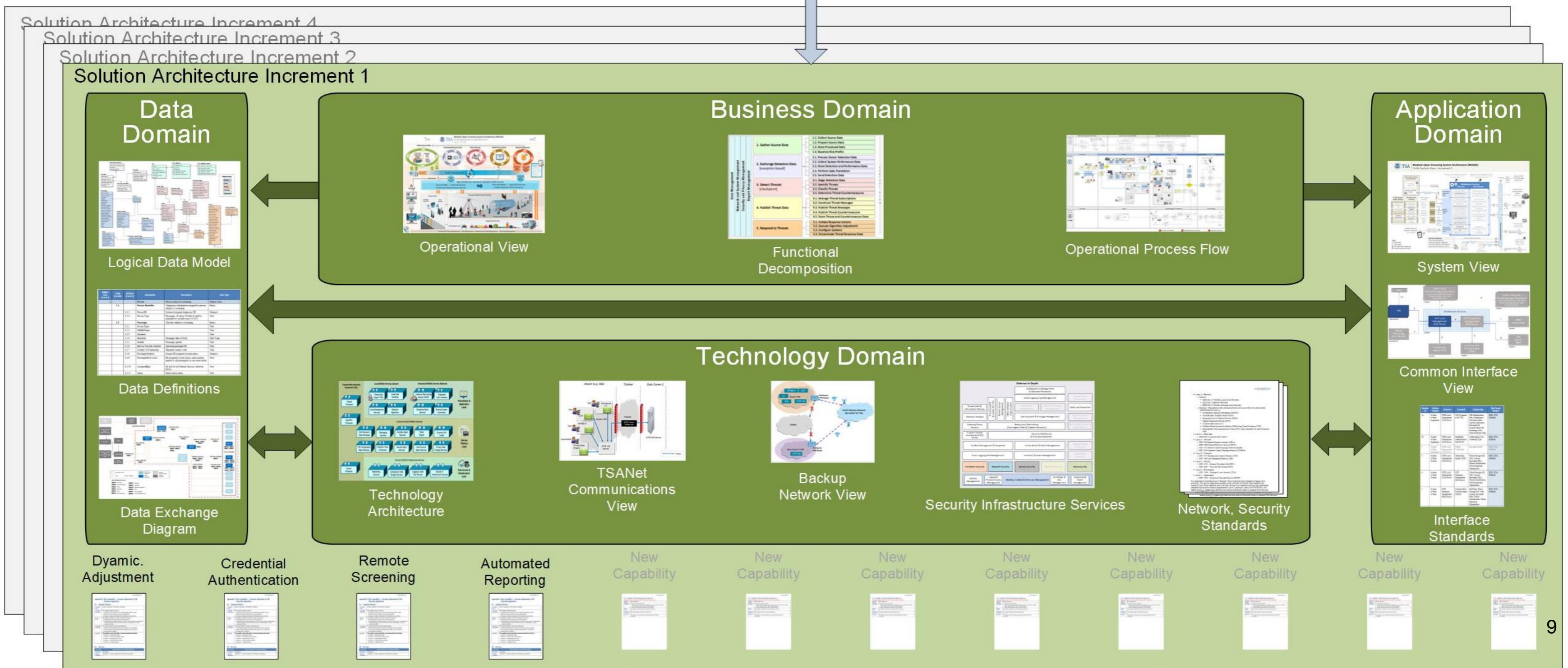
May 15, 2018

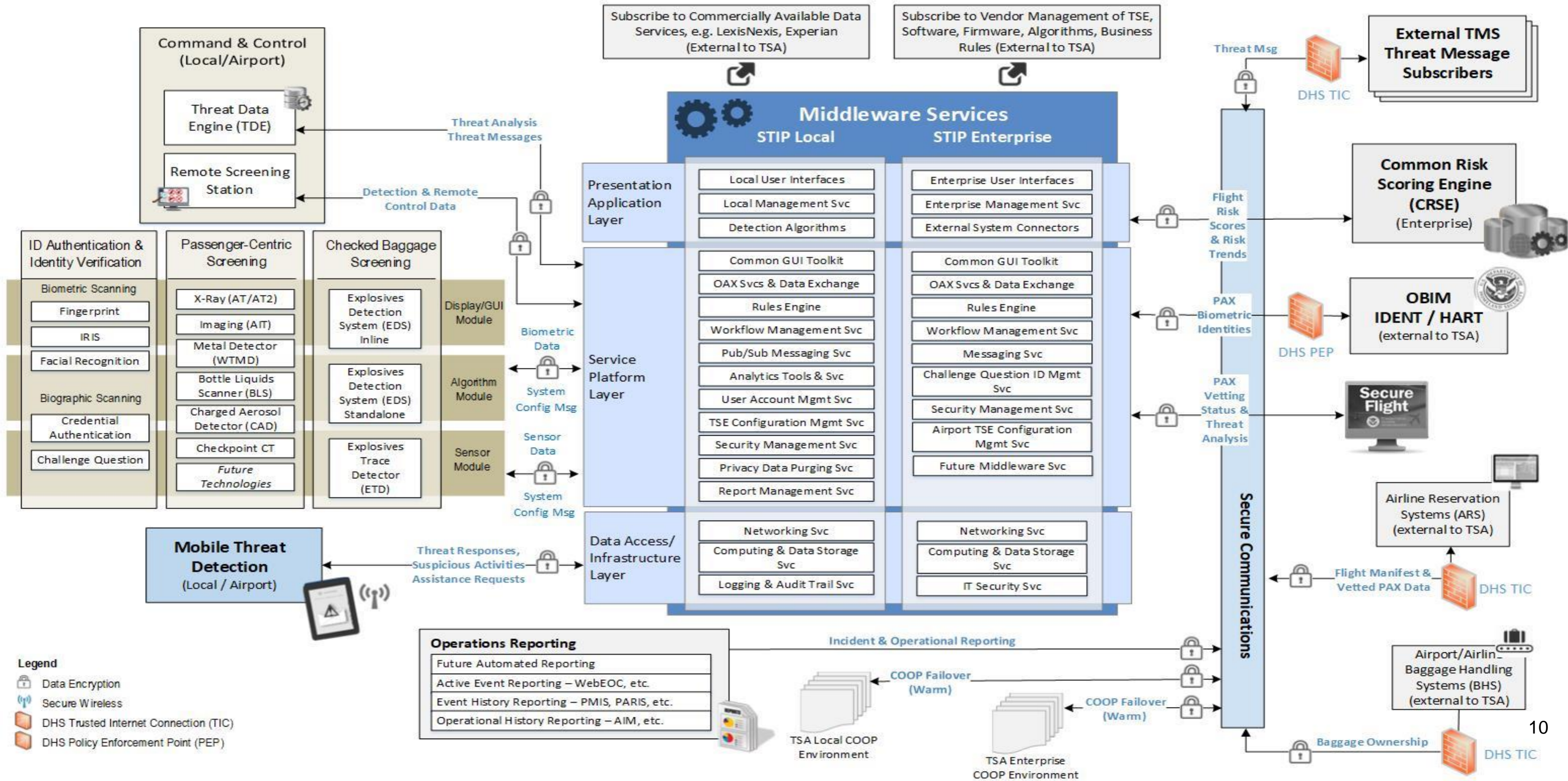
MOSSA (simplified)



MOSSA Domains

DHS and TSA Mission Risks, Needs, and Priorities





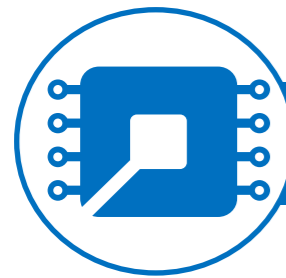
So what? Who cares?

Helps industry work with DHS to shape standards that are mutually beneficial.

- Understand how and where data will be used
- Context for why TSA adopts certain standards

Potential to access much greater volume and diversity of data to monitor and improve products and services.

What impacts can Industry expect?



New Capabilities

As modularity and interoperability becomes more prevalent, TSA will be able to add new capabilities to the fleet easier and more often due to defined interfaces and interoperability between vendors.



Specialization and Differentiation

As new capabilities continue to be introduced it will allow vendors the ability to choose if they want to do R&D to achieve the need or work with a 3rd party for the specialization. Allowing vendors to prioritize their own work and funds.



Streamlining Acquisitions

Smaller acquisitions tend to have simpler processes that move faster and happen more often; allowing for more predictable paychecks on a more regular basis.



Increasing Transparency

Increased transparency with industry and DHS stakeholders through RFIs, working sessions, Industry Days, and potential consortium style meetings will all allow for Industry to be informed early and often to make adjustments and develop in an agile fashion.

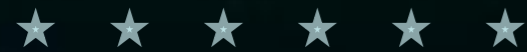
Open System Architectures Adjacent to TSA's MoSSA

Lessons Learned

Amir Neeman

Sandia National Labs, OTAP Project,
Supporting

TSA Office of Requirements and
Capabilities Analysis



ADSA 18

May 16, 2018



Transportation
Security
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Open System Architectures (OSA) Study Overview

Adjacent OSAs:

- *DICOM*
- *DoD MOSA*
- *DoD FACE*
- *DNDO ROSA*
- *VA ViSTA*



Review Adjacent OSAs Key 13 Questions, Methodology and Major Findings



Obtain Industry's Feedback and Recommendations for TSA to Successfully Execute MoSSA



Discuss Key Similarities with OSAs, Drivers of Success and OSA Advantages



Review OSAs Disadvantages and Lessons Learned Applicable to TSA's MoSSA



Discuss IP Protection vs. Open Systems Solutions in OSAs and Applicability to TSA's MoSSA



Q&A

