

# 3DS - Platform One Plan

Create Speed and Savings in Defense Acquisition



# Presenters Bio

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- **Allen Kerbow**
- **Dassault Systemes**
  - North America Aerospace & Defense Industry Consulting Director
- **Lockheed Martin Missiles & Fire Control**
  - Various positions in Manufacturing, Supply Chain, and Quality
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# Bottom Line Up Front

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- **Dassault Systemes (3DS) began working with the United States Air Force (USAF) Platform One to in summer 2021 based on a customer requirement**
  - Platform One IL5 go-live delays has moved 3DS go-live to Q1 2023
- **3DS estimates Platform One could save the Department of Defense (DoD) \$1.2B over five years**
  - Based on estimated \$15M savings per Major Defense Acquisition Program (MDAP)
  - 78 MDAPs in FY23 Comptroller budget
  - The 2021 USAF Biennial Report shows 488 Programs that would go through other acquisition pathways that are not included in the savings estimate

# Platform One High Level Introduction

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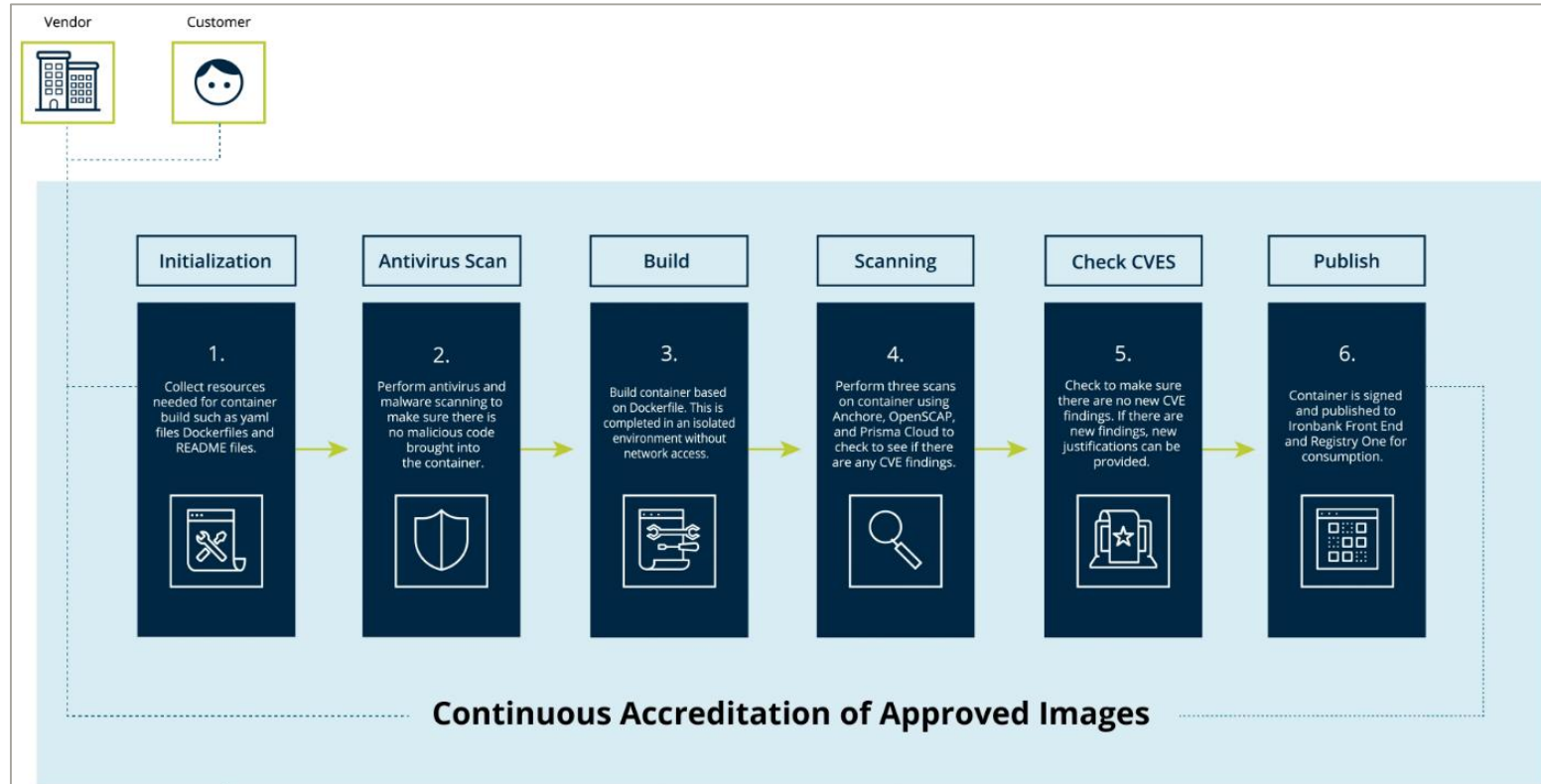
- **Platform One is comprised of several services, many of which are aimed at software developers**
  - Platform One has demonstrated the ability to push code updates to assets in flight
- **3DS' main focus is on the Iron Bank service**
  - ½ of the Iron Bank is the cybersecurity validation pipeline
  - ½ of the Iron Bank is a repository of software images and scan results



# Iron Bank Pipeline

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- The Iron Bank inducts software, executes a container build, and scans results for vulnerabilities
  - Re-run every ~12 hours
- Vulnerability reports are reviewed by an Authorization Official
  - Approved Containers are published along with vulnerability reports



<https://p1.dso.mil/products/iron-bank>

***Understanding the Iron Bank value requires understanding the Authorization to Operate (ATO) process...***

# Authorization To Operate

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- **ATO is official management decision given by to authorize operation of an information system and to explicitly accept the risk to organizational operations**
  - ATO occurs in the Authorize step of the Risk Management Framework (RMF)
- **ATO is recurring cost**
  - A new ATO is required after a defined period (often 3 years)
  - Major version releases of new software require a new ATO
- **ATO for a new system takes 6-18 months**



<https://csrc.nist.gov/projects/risk-management/about-rmf>



# Iron Bank Value Proposition Explained

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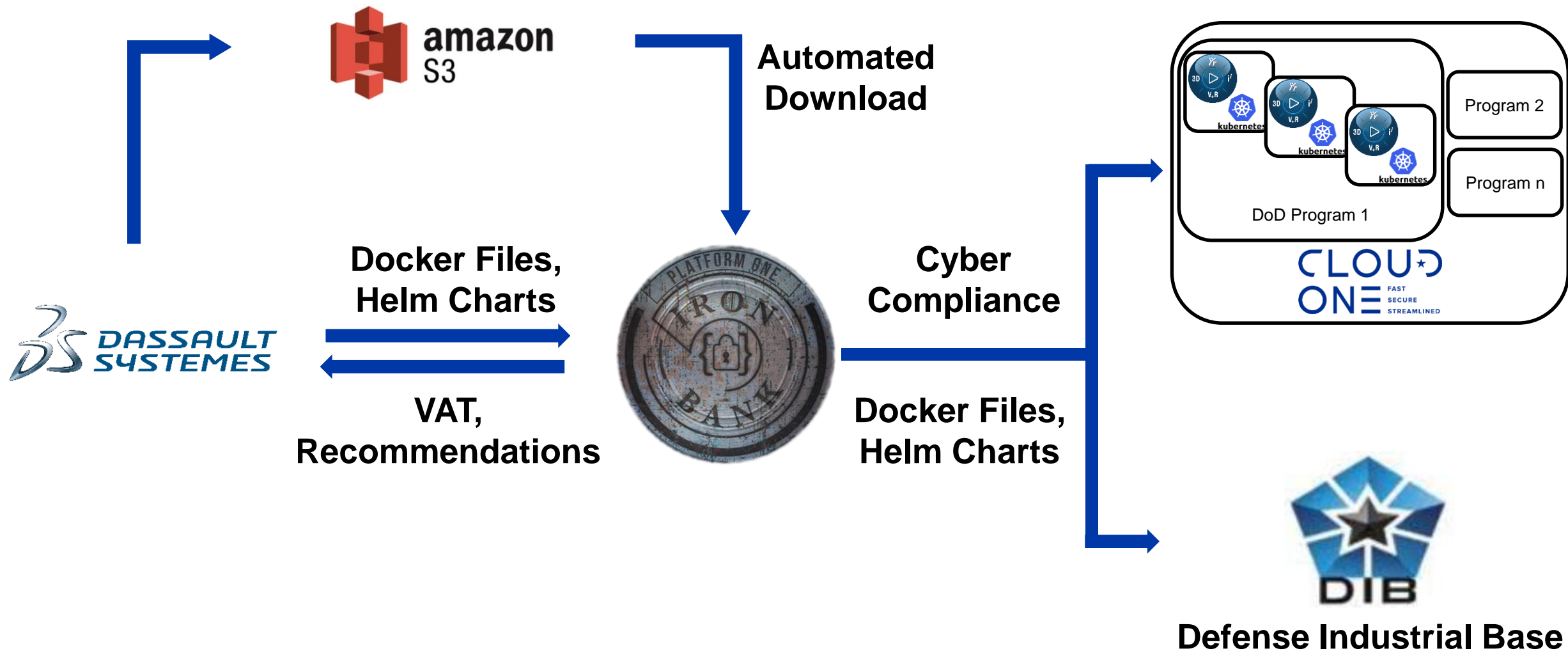
- **The Iron Bank pipeline is an attempt to automate the “Assess” step of the RMF**
  - Up to a 4-16 month reduction in initial ATO, providing major savings for new Programs
  - Ability to use latest software revisions rather staying on outdated versions to avoid ATO
  - Centralized location for vulnerability assessments for reciprocity
- **The closest parallel to the Iron Bank is the Apple App Store**



*Apple App Store Icon*

# 3DS – Platform One High Level Design

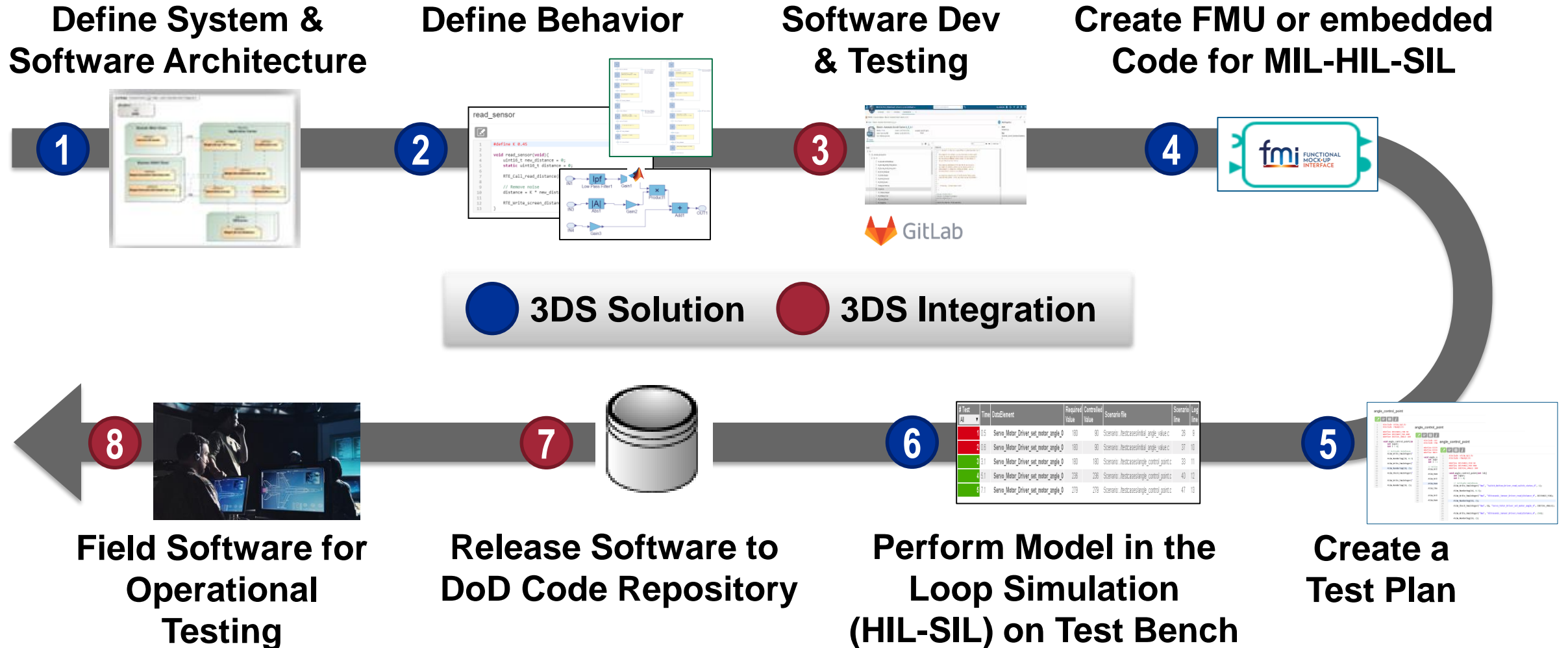
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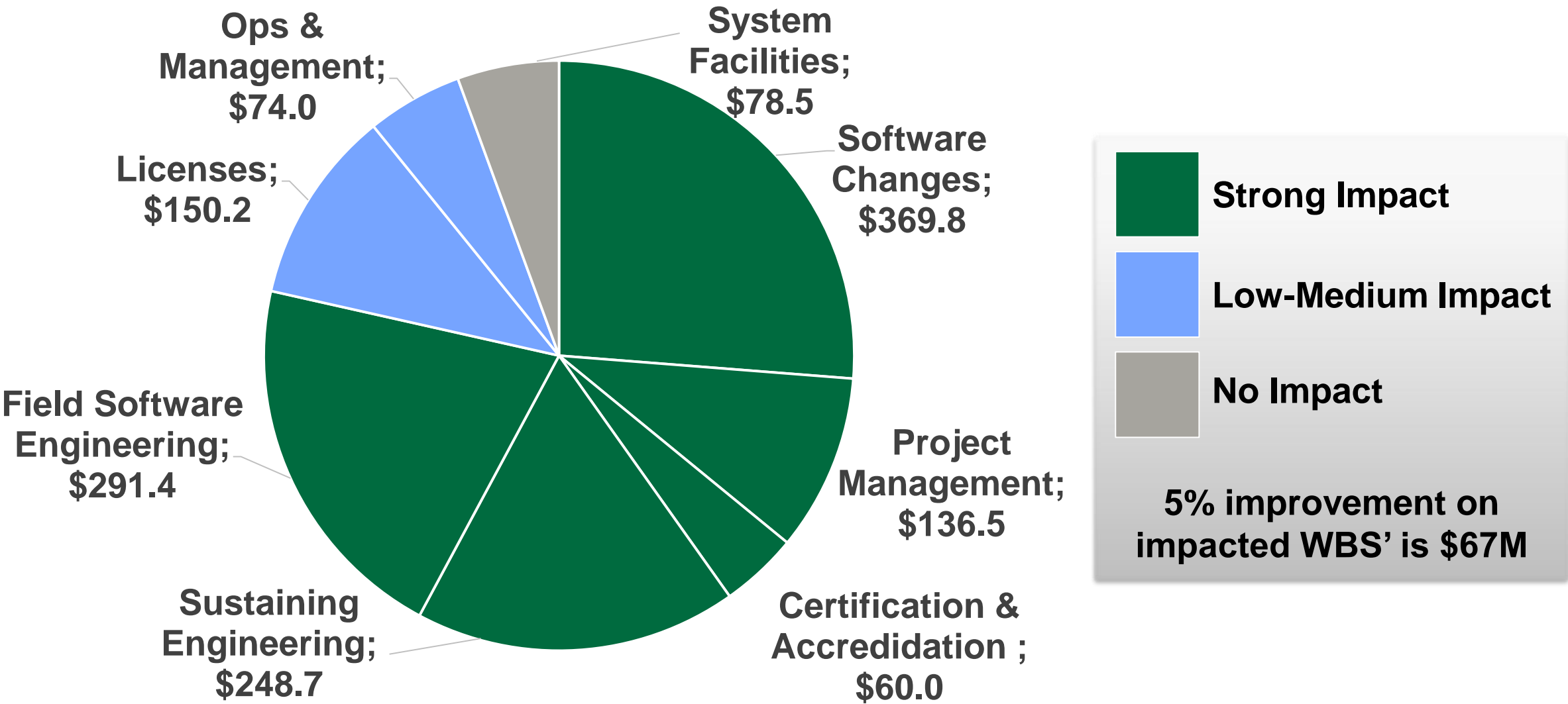
# 3DS – Platform One Software Engineering Workflow

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# 2019 Army Software Sustainment Budget (\$M)

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# Value Proposition Beyond ATO

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- **Software Engineering should be connected to MBSE to improve HIL-SIL simulation, system safety analysis, test management, and certification process**
- **President Biden's Executive Order 14028, "Improving the Nation's Cybersecurity," could lead to Risk Management Framework (or similar) adoption in other industries throughout the private sector**
  - **National Telecommunications and Information Administration (NTIA) and Federal Trade Commission (FTC) are part of the consortium leading the effort**
- **Platform One provides a blueprint for how the DoD is scaling DevSecOps for both system safety and supporting infrastructure**

# 3DS – Platform One Schedule

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**Apr 2021**

**3DS license  
request for  
Cloud One  
via Platform  
One**



**Oct 2021**

**Iron Bank  
onboarding  
begins,  
targeting  
future IL5  
deployment**



**Q1 2022**

**Iron Bank IL5  
delayed, so  
Cloud One  
deployment  
shifts to VM  
deployment**



**Sept 2022**

**Cameo  
Enterprise  
Architect  
2022x.x ATO**



**EOY 2022**

**3DX 2022x.x  
ATO award**

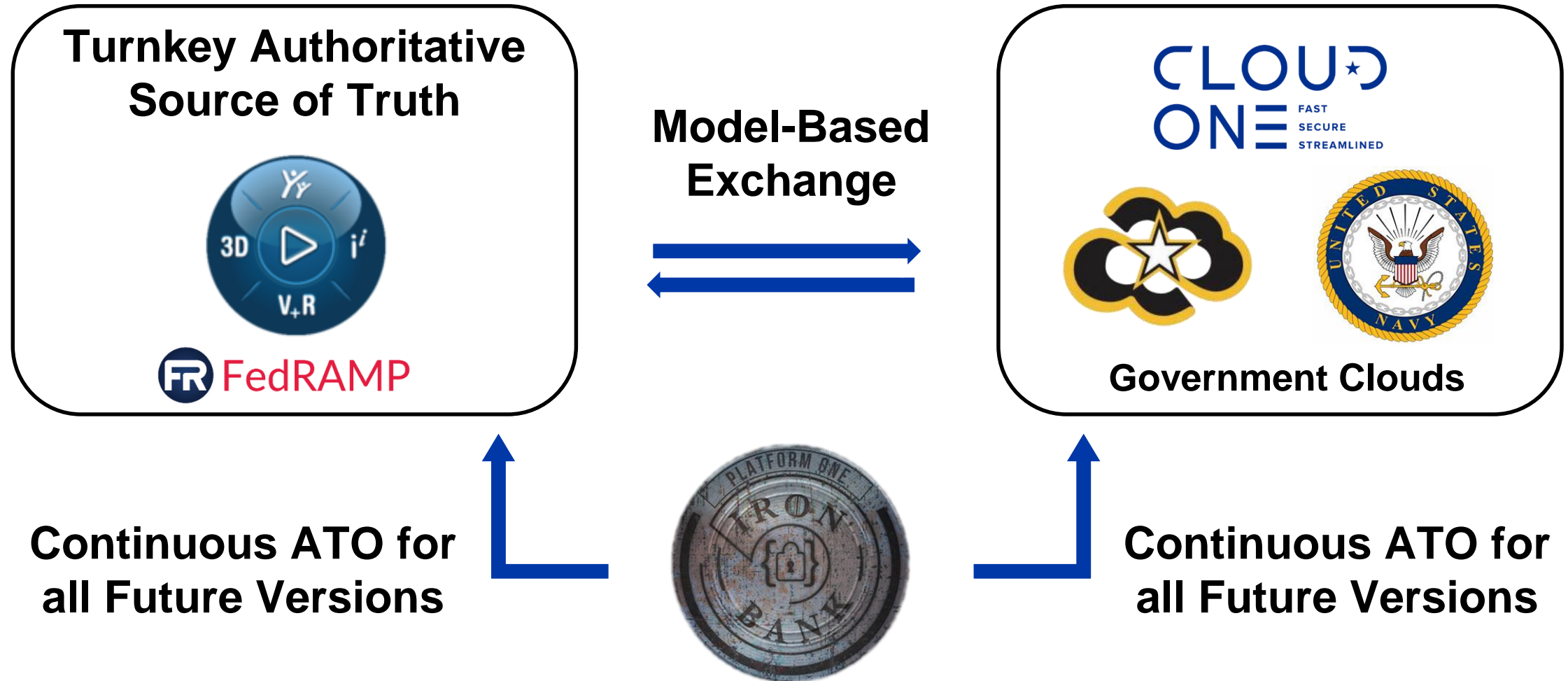


**Q1 2023**

**Iron Bank IL5  
go-live**

# 3DS – Platform One Long Range Vision

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# Summary

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**Enables c-ATO**



**Faster Deployments**



**Cyber Compliance**

- **The potential to streamline ATO could save up to \$1.2B over five years**
- **3DS is pursuing Platform One to help enable this savings potential and to accelerate capability to warfighter**