



Engineering, Operations & Technology
Phantom Works

Phantom

Engineering SWIM

Al Sipe, Ken Breiding

Integrated Communications Navigation
and Surveillance Conference (ICNS)

May 2, 2007

Presentation Overview

- **Purpose**
- **Areas**
- **High Level Program Plan**
- **Engineering Dimensions**
- **Segment 1**

What is needed to move to System Wide Information Management?

- **Technical**

- Information Engineering
- Data Engineering
- Hardware
- Software
- Administration
- System Development

- **Programmatic Considerations**

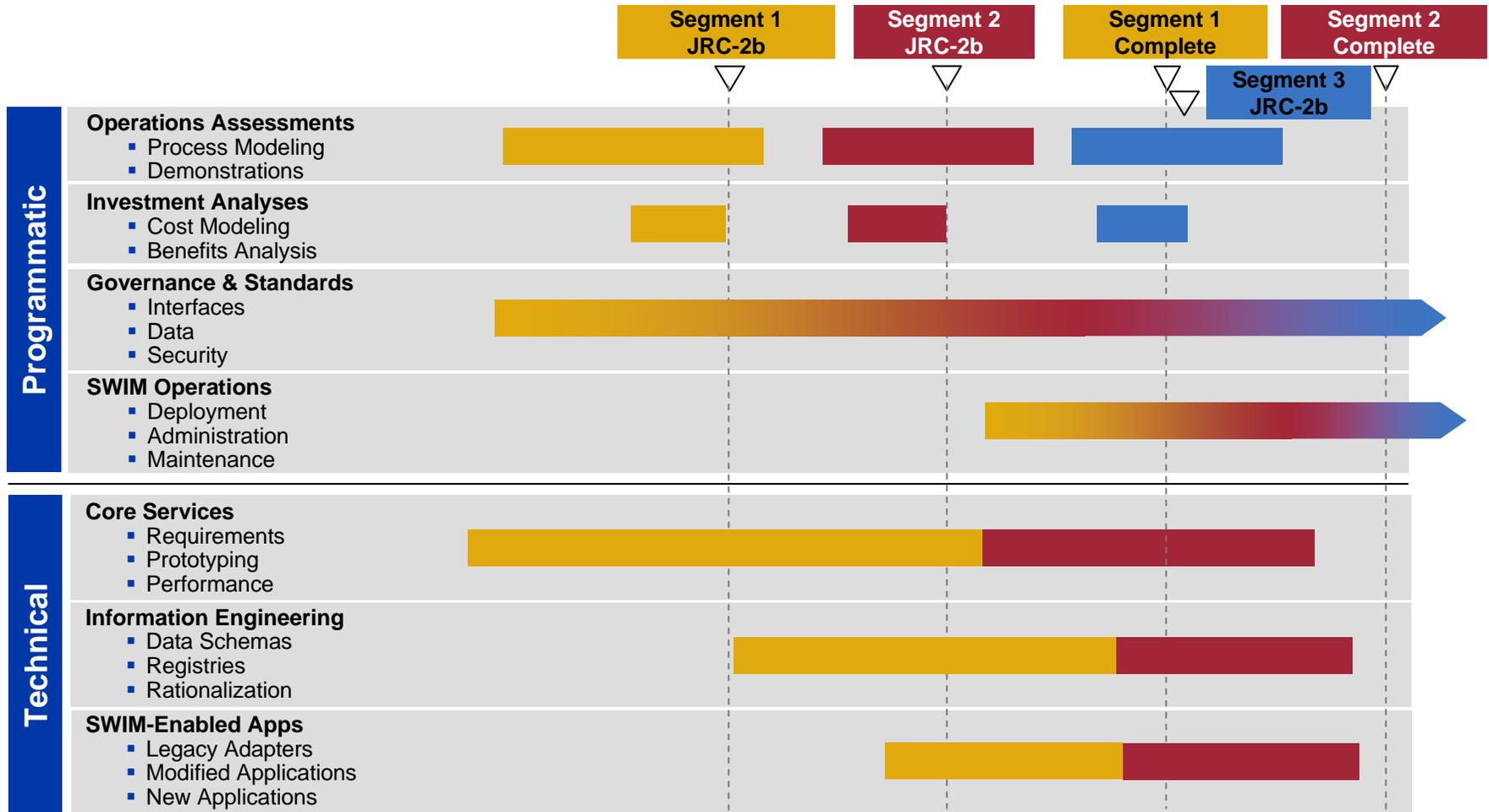
- Program Interaction
- Organizational Interaction

- **Governance**

- Process Modeling
- Interface Control
- Security Administration
- Registry Administration

SWIM Roadmap (Notional)

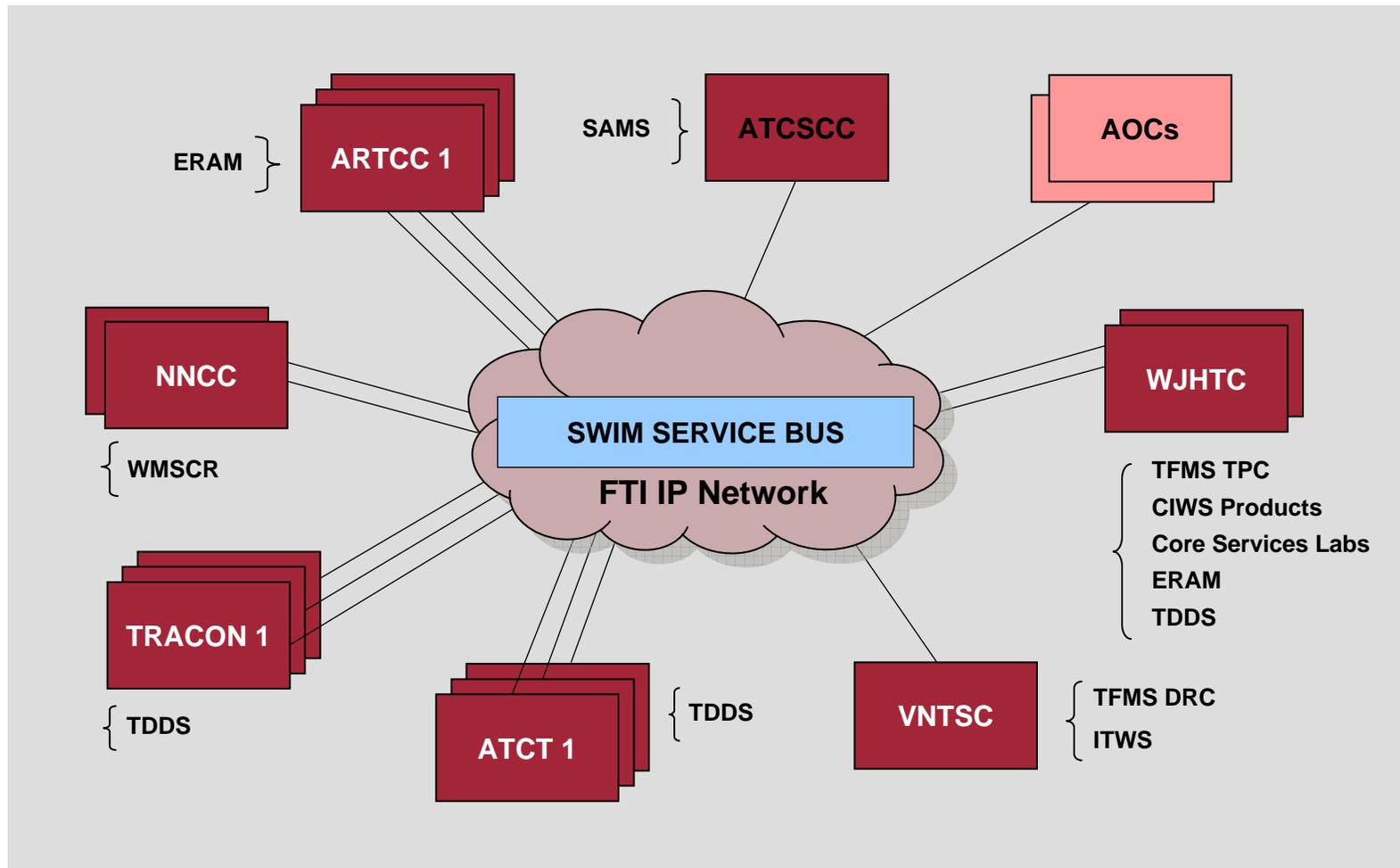
Engineering, Operations & Technology | Phantom Works



■ = Segment 1 ■ = Segment 2 ■ = Segment 3

SWIM Segment 1 Overview

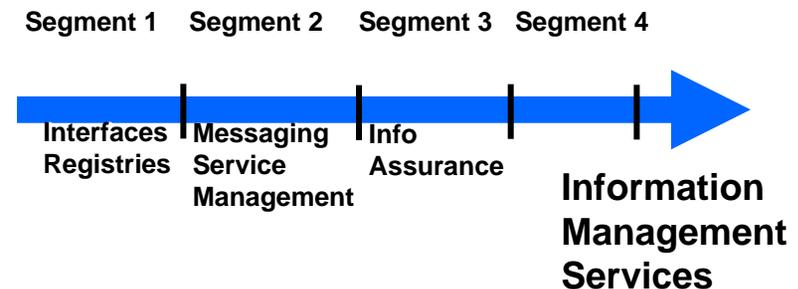
Engineering, Operations & Technology | Phantom Works



Information Management Services Dimension

Engineering, Operations & Technology | Phantom Works

- **Segment N Services**
 - Interfaces
 - Registry / Directory
 - Messaging
 - Service Management
 - Information Assurance
- **Segment Selection Criteria**



There are lower level services within each major service category.

Information Management Services

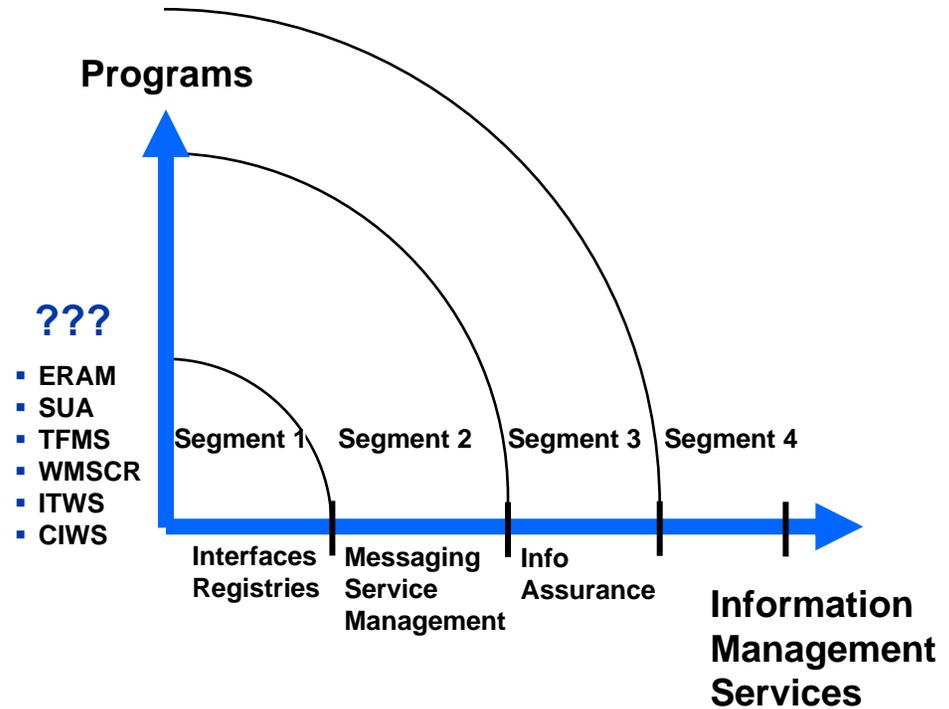
Engineering, Operations & Technology | Phantom Works

- **Segment N Services**
 - Interfaces
 - Registry / Directory
 - Messaging
 - Service Management
 - Information Assurance
- **Segment Selection Criteria**

There are lower level services within each major service category.

Programs Dimension

Engineering, Operations & Technology | Phantom Works



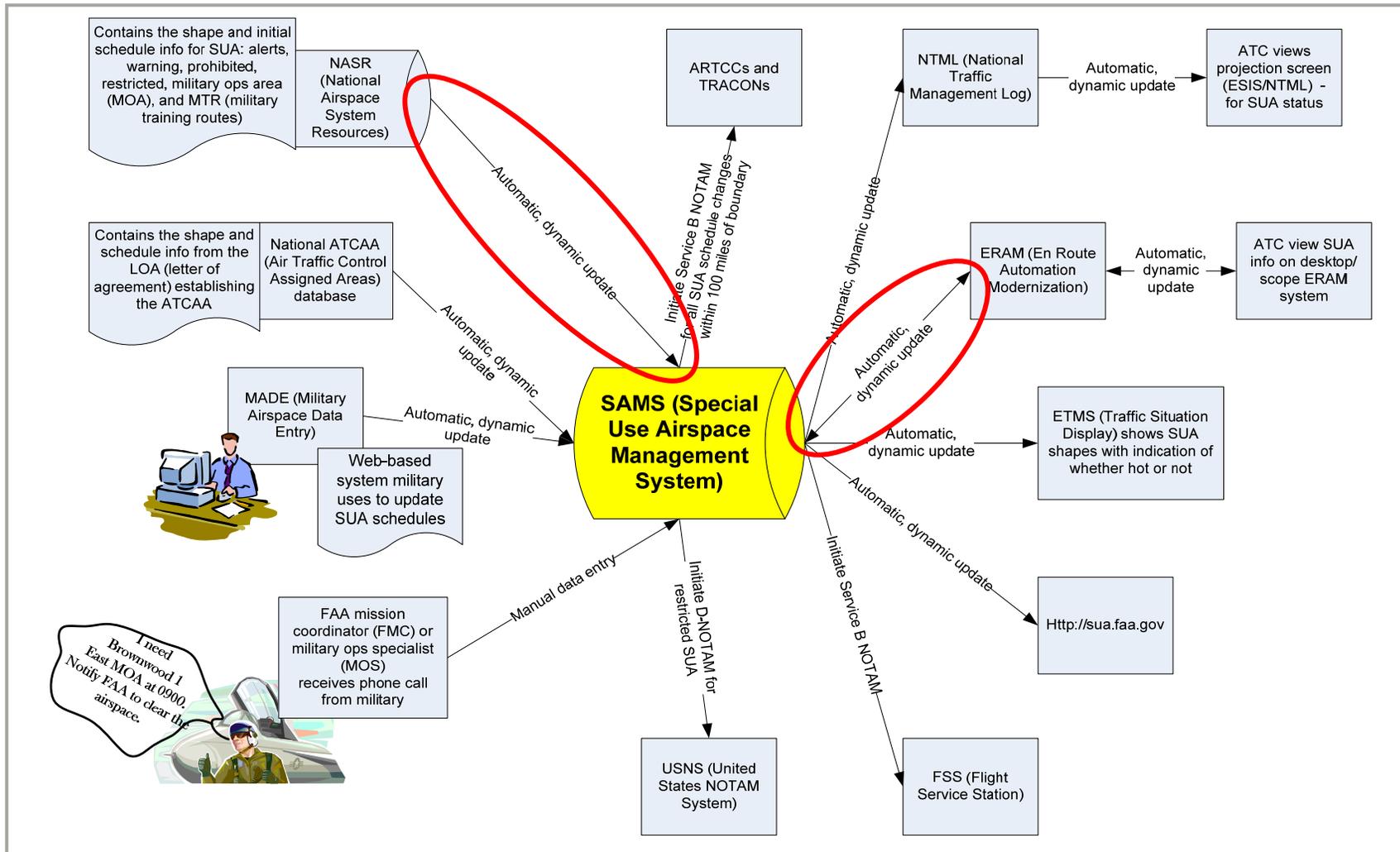
Programs

Engineering, Operations & Technology | Phantom Works

- **Segment N Programs**
- **Segment 1 Programs**
 - ERAM
 - TFM
 - CIWS
 - ITWIS
- **Segment 1 information**
 - Special Use Airspace (SUA) changes
 - Surface Information
 - CIWS data
 - ITWS data to NAS users
 - providing the Traffic Flow Management (TFM) Flow Object
 - capturing and publishing PIREPs to controllers
 - RVR (Runway Visual Range)
- **Segment Selection Criteria**

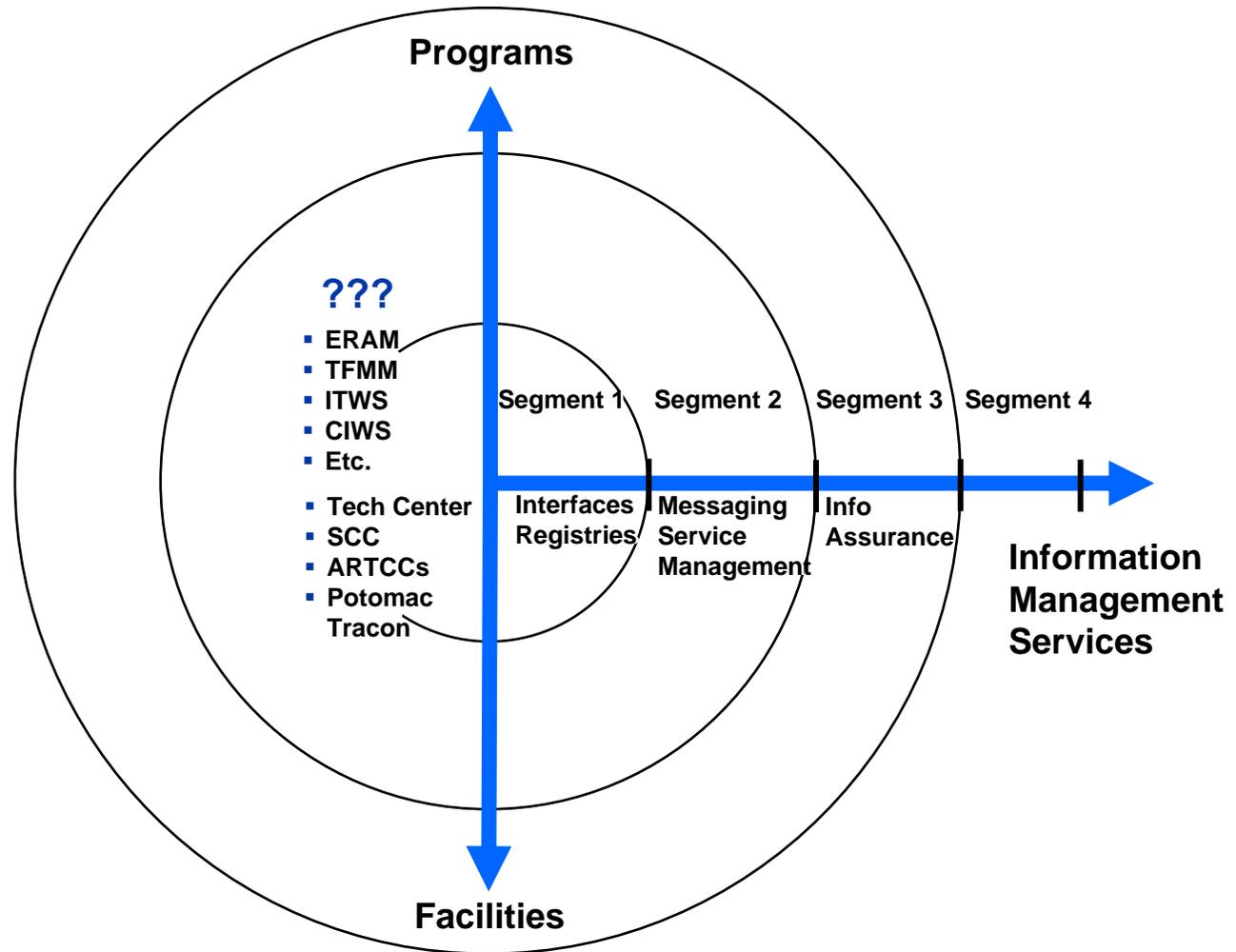
AIM SUA – Eg Business Process Engineering

Engineering, Operations & Technology | Phantom Works



Facilities Dimension

Engineering, Operations & Technology | Phantom Works



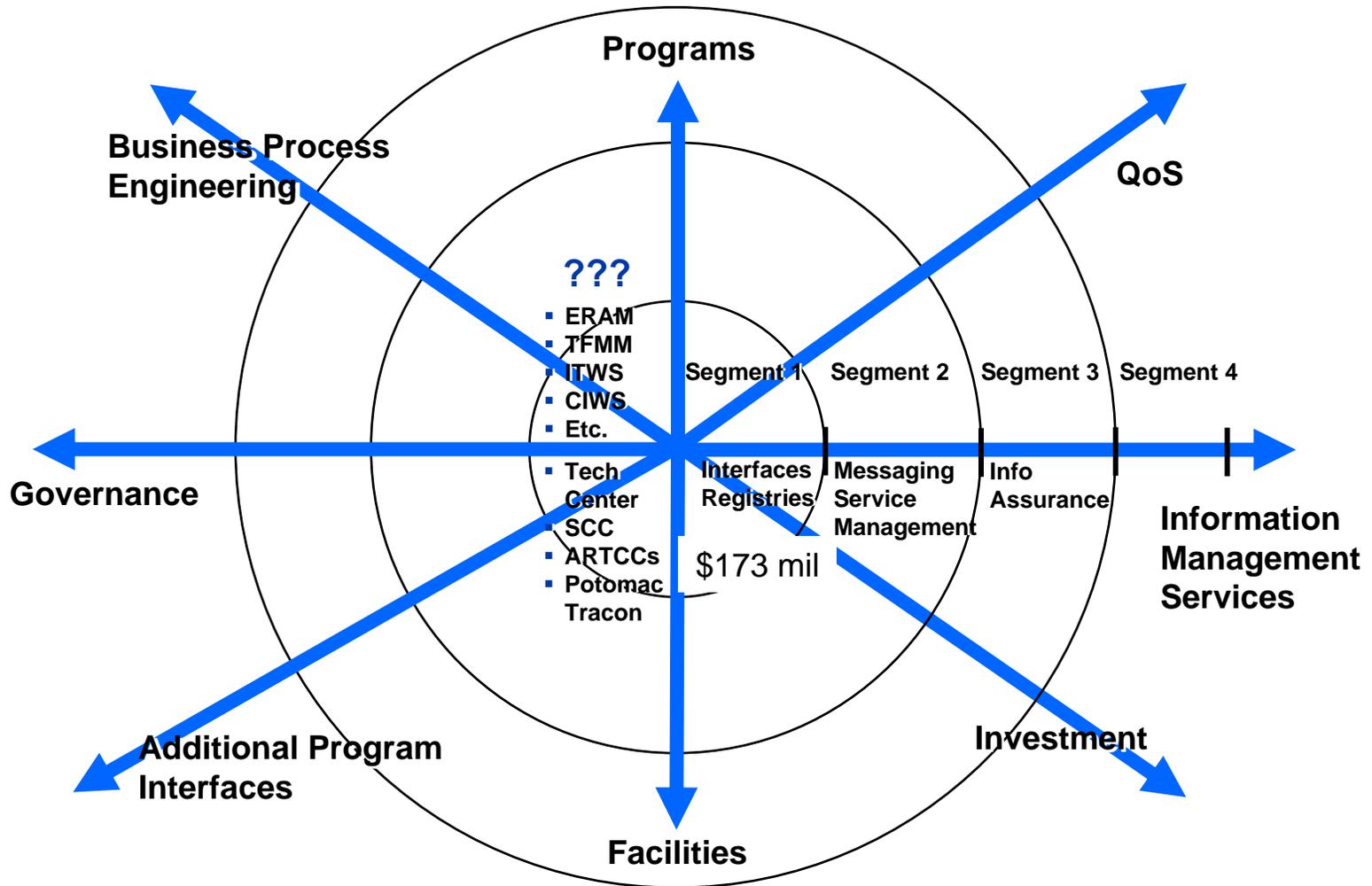
Facilities

Engineering, Operations & Technology | Phantom Works

- **Segment N Facilities**
 - ARTCCs (20)
 - SCC (1)
 - Tech Center (1)
 - Terminal (TBD)
 - Tower (~616)
 - NACO (1)
 - AWC (1)
 - Public (via Portal)
- **Geographical Rollout plan**

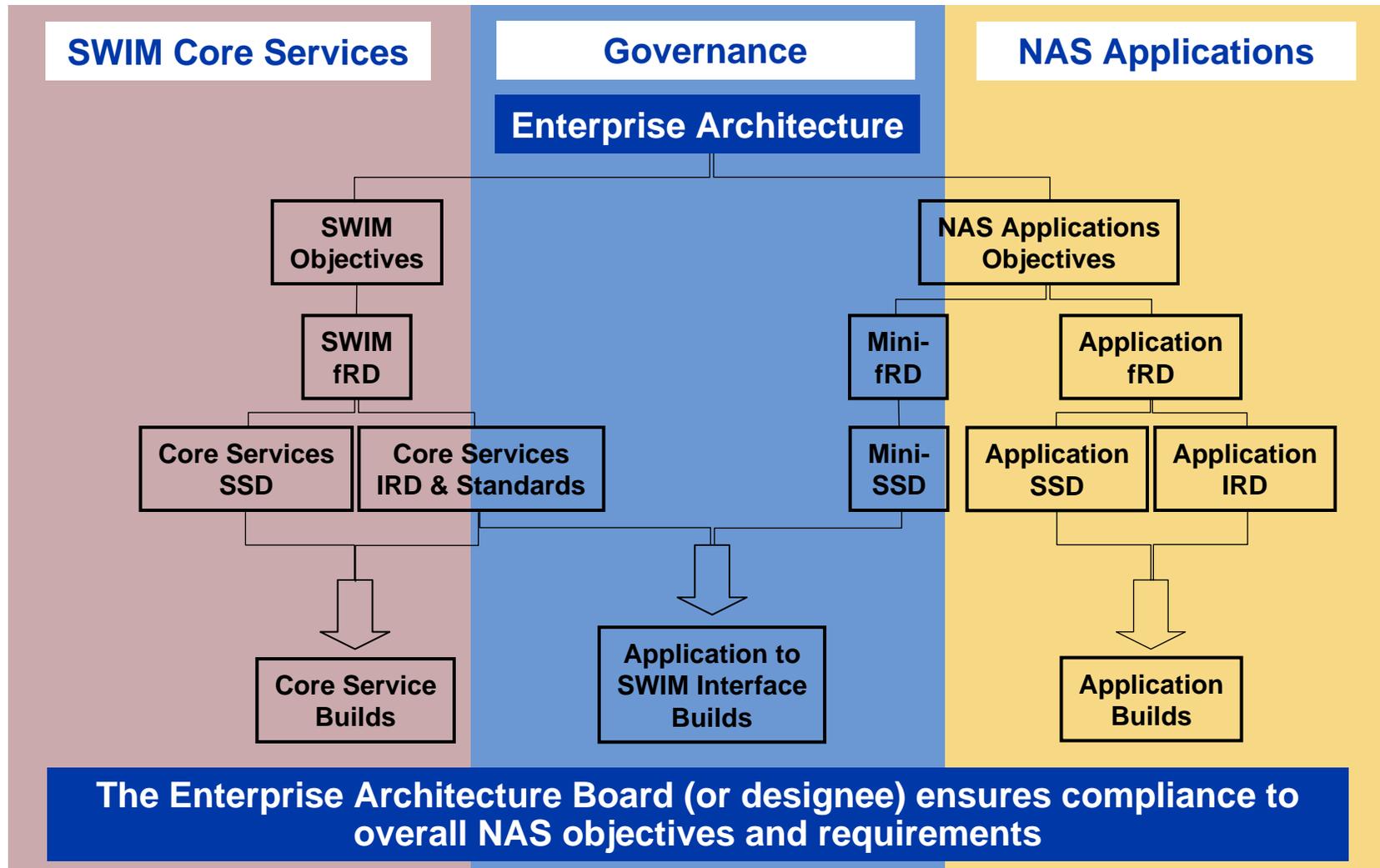
SWIM Dimensions

Engineering, Operations & Technology | Phantom Works



Requirements Flowdown

Engineering, Operations & Technology | Phantom Works



SWIM Architecture with Core Services

Engineering, Operations & Technology | Phantom Works

