

Technology Services Board Quarterly Meeting

June 11, 2019

9:00 a.m. - Noon



WA • Office of the

Chief Information Officer

6/11/2019

AGENDA

| TOPIC | LEAD | PURPOSE | TIME |
|--|---|--|-------|
| Welcome, Introductions and Approval of March 12 Meeting Minutes | Jim Weaver | Introductions, Approval | 9:00 |
| Small Agency Roundtable <ul style="list-style-type: none"> Board of Accountancy – CPA Licensing System Modernization Board for Volunteer Firefighters and Reserve Officers – Pension and Benefit Tracking System Gambling Commission – Information Systems Modernization Environmental & Land Use Hearings Office – Case Management Replacement – Feasibility and Readiness Assessment | Sue Langen Amy Pearson Laura Parma Rich Tomsinski Amy Pearson | Early consultation for small agency projects | 9:10 |
| BREAK | | | 10:10 |
| Project Status – WSDOT Tolling Back Office System Replacement Project (BOS) <ul style="list-style-type: none"> Patty Rubstello, Asst. Secretary and Executive Sponsor Jennifer Charlebois, Project Manager Matt Modarelli, WSDOT CIO Dana McLean, QA, Public Consulting Group, Lead Yvonne De La Rosa, Public Consulting Group, IV&V Lead Steve Levine, ETAN CEO Albert Yi, ETAN | Sue Langen Rich Tomsinski | Project update / Advice needed | 10:20 |
| Office of Cybersecurity | Ron Buchanan | Introduction of state CISO and strategies | 10:50 |
| Legislative Session Update | Adam Eitmann | Update from 2019 session | 11:20 |
| TSB Subcommittees | Sue Langen | Discussion / member feedback | 11:30 |
| Public Comment | | | 11:50 |
| Possible Executive Session – Only members and staff permitted | | | 11:55 |

Current TSB Members

Industry Members

Butch Leonardson – Leonardson Leadership Services
Paul Moulton – Costco (via WebEx)

Legislative Members

Rep. Zack Hudgins - House D
Sen. Patty Kuderer – Senate D (via WebEx)

Executive Branch (Agency Directors)

Jim Weaver – State CIO & Chair
David Danner - UTC
Tracy Guerin – DRS (via WebEx)
Vikki Smith – DOR

Other Government

Jeff Paulsen – Labor Rep

Members present
Members absent

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Small Agency Roundtable

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Small Agencies at a Glance

| Agency | Total FTEs (FY18) | IT FTEs (FY18) | IT Spend FY2018 | Anticipated Project Cost | Project Cost as % of FY2018 IT Spend |
|---|-------------------|----------------|-----------------|--------------------------|--------------------------------------|
| Board of Accountancy | 10 | 2 | \$268,916 | \$1,742,000 | 648% |
| Board for Volunteer Firefighters and Reserve Officers | 4 | 0 | \$5,374 | \$275,000 | 511% |
| Environmental and Land Use Hearings Office | 14 | 0 | \$119,918 | \$170,000 | 142% |
| Gambling Commission | 107 | 6 | \$1,337,659 | \$250,000 | 19% |

Break

Project Status

WSDOT – Tolling Back Office System Replacement

6/11/2019

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Washington State Department of Transportation

Tolling Back Office System Replacement Project

■ Agenda

- Purpose
- History
- Project Status
- WSDOT Management Strategy and Mitigations
- ETAN Challenges, Strategy and Mitigations
- Current Risks
- Questions

WSDOT — Tolling Back Office System (BOS) Replacement Project

Purpose

- The external BOS is a core element of WSDOT's Toll program. The BOS manages the customer relationship and financial management aspects of WSDOT's Tolling program and its *Good To Go!* Toll payment program.
- The existing Contract was a bundled procurement for customer service center operations and a back office system and this Contract is approaching end of Contract term. The new BOS and Operations will be separated into two contracts and have been procured separately.
- The new BOS System will provide the full functionality of the existing system, address functional deficiencies, address key limitations with the existing system, and support several key enhancements to program functionality.

WSDOT – Tolling Back Office System (BOS) Replacement Project

History

- Procurement complete in June of 2017 (Award to ETAN), base 6 year term with 6 option years.
- Two phases of Implementation:
 - Phase 1 - consists of all current and new core functionality modernized and enhanced.
 - Phase 2 - consists of all select automation upgrades and elected option modules such as trip building, collections, and data warehouse.

WSDOT – Tolling Back Office System (BOS) Replacement Project

Implementation Status

- Original Go-Live date: December 1, 2018.
- In mid-2018, ETAN notified WSDOT of a delay to February 2019. In late 2018, another notification of delay to May 2019. In spring of 2018, another notification of delay to July 2019.
- **Due to these repeated delays and decreasing confidence in the vendor's schedule adherence, WSDOT determined a Go-Live of August 30, 2019 to be the most realistically achievable date.**
- Significant progress continues to be made:
 - Substantial completion on all core FastLane development - design change updates, accounting and defect resolution remain.
 - Factory Acceptance Test Execution & Integration and Commissioning testing has begun.
 - Test Procedure finalization for all functionality is underway.
 - Data Migration and Transition Planning, analysis and mapping continues, with the first trial migration complete
 - Infrastructure build-out and provisioning of CSC and WICs nearing completion.
 - Training Manual development and iterative training underway

WSDOT – Tolling Back Office System (BOS) Replacement Project

WSDOT Management Strategy and Mitigations

- Increased executive-level oversight and coordination to more quickly address schedule and resourcing issues. In-person Executive check-ins have increased to a weekly frequency.
- Stronger WSDOT control of the schedule to ensure realistic and achievable timelines for the remainder of the critical path activities.
- WSDOT assumed ownership of Go-Live readiness assessments and needed coordination.
- WSDOT has increased access to WSDOT and consultant SME's to supplement ETAN's resources.
- WSDOT has worked to streamline review and approval processes to gain schedule efficiency.
- WSDOT continues to coordinate with our legacy BOS vendor to ensure continuity of operations through the BOS transition.
- WSDOT continues to consult with our Expert Review Panel, made up of national agency leaders and industry experts.

WSDOT BOS – Updated Project Risks and Mitigation

■ Priority Risks, Issues and Mitigations

| # | Risk | Mitigation/Comment |
|---|--|--|
| 1 | Vendor does not understand or misinterprets WSDOT design requirements, causing re-work and risk to schedule. | Isolated examples seen during test procedure reviews. Increasing coordination through more frequent demonstrations and including ETAN design resources in test procedure review discussions. |
| 2 | Inadequate WSDOT resources and time to review Vendor documentation | Concurrent deliveries and limited review time can constrain project team. Deployed targeted reviews with associated subject matter experts. Utilizing comment resolution meetings to resolve comments in real time and reduce the need for multiple review cycles. |
| 3 | Prioritization of Go Live date causing unacceptable project compression | Continual review of project status and schedule to ensure realistic and achievable timelines, focus on system readiness to meet business objectives and customer expectations. |
| 4 | Disagreement between WSDOT and Vendor on testing methodology | Holding to best practice and contractually prescribed test sequencing as much as is practical, while allowing for innovation and flexibility where possible. |

WSDOT – Tolling Back Office System (BOS) Replacement Project

ETAN Challenges

- Working within a Waterfall project framework and attempting to take a “Hybrid” Waterfall-Agile/Iterative approach
- Unanticipated effort in dealing with the extraordinary poor condition of the legacy data

WSDOT – Tolling Back Office System (BOS) Replacement Project

ETAN Strategy and Mitigations

- ETAN has restructured project delivery to support the remaining delivery (data migration, testing, training, transition) in a Waterfall framework in order to meet the final project schedule and revised go-live
- Active project participation by ETAN executive management to support PM and key resources to monitor daily progress, assist with resource prioritization and remove blockers
- ETAN has invested, hired and on-boarded additional SQL developers to accelerate mapping and validation of the legacy data
- ETAN has invested, hired and on-boarded additional developers to accelerate re-factoring and defect resolution
- ETAN has invested, hired and on-boarded an additional QA and Testing team (external) to accelerate test execution
- WSDOT and ETAN executive teams conduct a weekly, in-person, progress meeting

WSDOT – Tolling Back Office System (BOS) Replacement Project

ETAN Improvement to date

- Improvement from 30% to 80% passed in FAT/ICT test execution
 - Improvement from 10 to 3 days to resolve defects
 - Current velocity of 90 tests passed per day; On track with the project schedule
- Based on the implementation and initial results of these changes, ETAN is confident in the new project schedule and that the Aug 30th Go-Live will be met.

External QA - Tolling BOS Replacement Project Status

Overall WSDOT CSC BOS Project Status

| | |
|-----------------------------|------------------|
| Project status remains High | HIGH ↔ |
|-----------------------------|------------------|

PCG is tracking **significant risks** around Schedule Management, Integration Management, Quality Management and Human Resource Management.

Total Negative Findings

- Issues: 2
- Risks: 4 high, 5 medium

Total Positive Findings

- Observations: 1

| ID | Assessment Category | Quarterly Trending Status (thru 5/31/2019) | | |
|------|---------------------------|--|------------|----------|
| | | March 2019 | April 2019 | May 2019 |
| 5.1 | Integration Management | ↔ | ↔ | ↔ |
| 5.2 | Scope Management | ↑ | ↔ | ↔ |
| 5.3 | Schedule Management | ↔ | ↔ | ↔ |
| 5.4 | Cost Management | ↔ | ↔ | ↑ |
| 5.5 | Quality Management | ↔ | ↔ | ↔ |
| 5.6 | Human Resource Management | ↔ | ↔ | ↔ |
| 5.7 | Communications Management | ↔ | ↔ | ↑ |
| 5.8 | Risk Management | ↔ | ↔ | ↔ |
| 5.9 | Procurement Management | ↔ | ↔ | ↔ |
| 5.10 | Stakeholder Management | ↑ | ↔ | ↑ |

QA Status Assessment Legend

| | | | | | |
|--|---|--|--|--|--|
| | Green - Poses the least risk to project success and can generally be considered near-free of risks to quality, scope, cost and/or schedule. | | Yellow - Poses a moderate risk to project success with some products or processes that present risk resulting in deficient quality, scope, cost or schedule. | | Red - Poses significant risk to project success with respect to the project quality, scope, cost, and/or schedule and should be given immediate attention. |
|--|---|--|--|--|--|

To easily track status changes between the current and former reporting periods, the following symbols will be added to the priority status rating.

| | | | | | |
|---|--|---|---|---|--|
| ↑ | Indicates the risk status has increased (worsened) since the last reporting period. | ↓ | Indicates the status has been decreased (in severity) since the last reporting period. | ↔ | Indicates the status has not changed since the last reporting period. |
|---|--|---|---|---|--|

External IV&V - Tolling BOS Replacement Project Status

05/31/2019
Overall WSDOT CSC BOS Project
Status
(Preliminary Assessment)

HIGH

Trending downwards

This preliminary assessment is based on the current re-planning efforts and the delayed go-live date (Labor Day).

*A revised schedule submitted May 30th;
 Currently in review with WSDOT and IV&V.*

| Assessment Category | Trending Status (03/15/2019 - 05/15/2019) | | |
|--|--|------------------|----------------|
| | March (R / I) | April (R / I) | May (R / I) |
| Technical Project Management | 2 / 5 | 2 / 5 | 2 / 5 |
| Design and Development | 1 / 1 | 1 / 1 | 1 / 2 |
| Control and Configuration | 0 / 0 | 0 / 0 | 0 / 0 |
| Implementation, Testing and Installation | 3 / 5 | 3 / 4 | 4 / 5 |

R: #Risks; I: #Issues

As of 05/15/2019, IV&V is tracking 19 Findings including 12 Issues and seven (7) Risks.

IV&V notes significant risks to: Technical Project Management, Design & Development, and Implementation, Testing & Installation.

External IV&V - Tolling BOS Replacement Project Status

| Assessment Category | Risks | Issues | IV&V Reporting as of 05/15/2019 (Pre Delayed Go-Live) |
|---|-------|--------|--|
| Technical Project Management | 2 | 5 | <ul style="list-style-type: none"> Continuing to monitor findings related to: <ul style="list-style-type: none"> Schedule Management Schedule Compression and impact on quality Development progress tracking Requirements Change Management Mounting workloads for WSDOT and ETAN resources |
| Design and Development | 1 | 2 | <ul style="list-style-type: none"> Continuing to monitor findings related to: <ul style="list-style-type: none"> Completion of outlier development items Completion of data migration and impact on testing activities |
| Control and Configuration | 0 | 0 | <ul style="list-style-type: none"> WSDOT and ETAN are continuing to follow the documented change request process to work through the changes requests |
| Implementation, Testing and Installation | 4 | 5 | <ul style="list-style-type: none"> Continuing to monitor findings related to: <ul style="list-style-type: none"> System Testing (FAT/ICT) Test Procedure reviews still in progress Test Procedure/RTM Quality Issues Slow System (FAT/ICT) Test Execution Velocity WSDOT System (FAT/ICT) Test Execution validation efforts Non-Testable requirements validation plan yet to be defined UAT Readiness Incomplete Training Materials |

A revised schedule aligning with a Labor Day go-live date was submitted on May 30th. This is currently in review with WSDOT. IV&V's preliminary review found that most of the areas of concern have been re-planned with revised completion dates. *IV&V will continue to review and monitor project activities and provide updates in the next reporting period.*

WSDOT BOS – Project Updates

- Questions?

WSDOT BOS – Project Schedule

| Activity | Start | Finish |
|--|---------|---------|
| TEST PROCEDURE UPDATE & COMMENT RESOLUTION | 5/19/19 | 6/12/19 |
| ETAN Pre-Testing (Internal) FAT & ICT | 5/20/19 | 6/3/19 |
| FAT & ICT Progress Report to WSDOT | 6/3/19 | 7/5/19 |
| FACTORY ACCEPTANCE TEST EXECUTION | 6/3/19 | 7/5/19 |
| ICT EXECUTION | 6/3/19 | 7/5/19 |
| Data Migration - Results Workshop & update plans w/WSDOT | 6/11/19 | 6/12/19 |
| E2E EXECUTION (ICT Package 5) | 7/1/19 | 7/12/19 |
| Data Migration - Results Workshop & update plans w/WSDOT | 6/26/19 | 6/28/19 |
| UAT | 7/8/19 | 7/24/19 |
| Operations Test | 7/25/19 | 8/16/19 |
| Shut Down & Go-Live | 8/17/19 | 8/30/19 |

State Cybersecurity

Office of Cybersecurity (OCS)

- Ron Buchanan – State CISO and Director, OCS
- Background:
 - Shared-service CISO and Director, Information Security & Privacy Office - Oregon Health Authority and Department of Human Services (4 yrs)
 - Supported FBI's Criminal Justice Information Services (CJIS) Division ISO (4 yrs)
 - Federal Special Agent focused on cybercrime and counterintelligence investigations and operations (11 yrs)
 - Retired Air National Guard and Air Force Reserve (21 yrs)
 - MA - Business and Organizational Security Management
 - CISSP, CPP, PMP

Three OCS Initiatives

1. Adopt national standards promoting cybersecurity alignment statewide and within national community
2. Add measurable value
3. Identify statewide risk-based cybersecurity priorities

Goals:

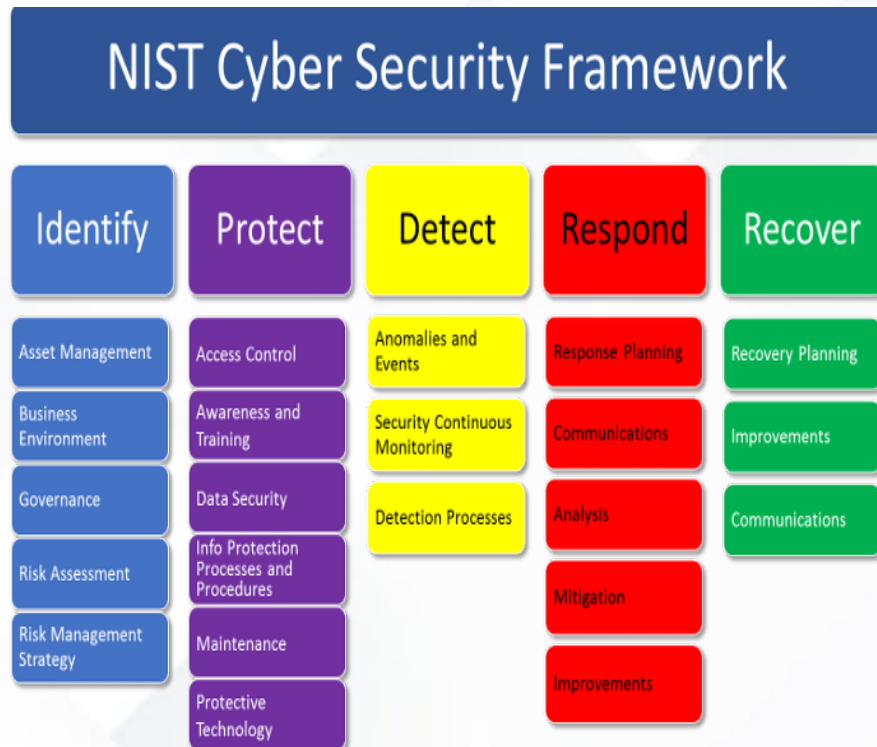
- Simplify
- Communicate
- Collaborate
- Risk-Based
- Measurable



OCS Initiative – #1

1. National Standards Promoting Cybersecurity Alignment Statewide and within National Community

- National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF) as statewide standard for measuring and reporting information security risk



| Function | Category | ID |
|----------|---|-------|
| Identify | Asset Management | ID.AM |
| | Business Environment | ID.BE |
| | Governance | ID.GV |
| | Risk Assessment | ID.RA |
| | Risk Management Strategy | ID.RM |
| | Supply Chain Risk Management | ID.SC |
| Protect | Identity Management and Access Control | PR.AC |
| | Awareness and Training | PR.AT |
| | Data Security | PR.DS |
| | Information Protection Processes & Procedures | PR.IP |
| | Maintenance | PR.MA |
| | Protective Technology | PR.PT |
| Detect | Anomalies and Events | DE.AE |
| | Security Continuous Monitoring | DE.CM |
| | Detection Processes | DE.DP |
| Respond | Response Planning | RS.RP |
| | Communications | RS.CO |
| | Analysis | RS.AN |
| | Mitigation | RS.MI |
| | Improvements | RS.IM |
| Recover | Recovery Planning | RC.RP |
| | Improvements | RC.IM |
| | Communications | RC.CO |

OCS Initiative – #1

- Center for Internet Security (CIS) Critical Security Controls as a measurable roadmap for implementing NIST 800-53 <https://www.cisecurity.org/controls/>

CIS Controls™

Basic

- 1 Inventory and Control of Hardware Assets
- 2 Inventory and Control of Software Assets
- 3 Continuous Vulnerability Management
- 4 Controlled Use of Administrative Privileges
- 5 Secure Configuration for Hardware and Software on Mobile Devices, Laptops, Workstations and Servers
- 6 Maintenance, Monitoring and Analysis of Audit Logs

Foundational

- 7 Email and Web Browser Protections
- 8 Malware Defenses
- 9 Limitation and Control of Network Ports, Protocols, and Services
- 10 Data Recovery Capabilities
- 11 Secure Configuration for Network Devices, such as Firewalls, Routers and Switches
- 12 Boundary Defense
- 13 Data Protection
- 14 Controlled Access Based on the Need to Know
- 15 Wireless Access Control
- 16 Account Monitoring and Control

V7

Organizational

- 17 Implement a Security Awareness and Training Program
- 18 Application Software Security
- 19 Incident Response and Management
- 20 Penetration Tests and Red Team Exercises

OCS Initiative – #1

- NIST National Initiative for Cybersecurity Education (NICE)
 - Framework to standardize government cybersecurity workforce roles, requirements, and training (NIST SP 800-181)



OCS Initiative – #1

- National Cyber Security Awareness Month (Hacktober)
 - Department of Homeland Security annual event
 - OCS will tailor four-week campaign to address identified statewide cyber security risks
 - <https://www.dhs.gov/national-cyber-security-awareness-month>



OCS Initiative – #2

2. Add Measurable Value

- Foster collaboration between agencies with statewide cybersecurity missions (OCS, SAO, MIL, etc.)
- Charter a formal state government CISO Council as a stakeholder forum and advisory council
- Identify opportunities to enhance county, city, .edu, and private partnerships
- Identify statewide “pockets of excellence” and share the knowledge within the cybersecurity community



OCS Initiative – #3

3. Identify Statewide Risk-Based Cybersecurity Priorities (National Cybersecurity Review (NCSR))

- Receive metrics specific to organization
- Use the metrics provided to identify gaps in organizational security program
- Develop a benchmark to gauge year-to-year progress
- Anonymously measure results against peers
- Part of the ongoing effort to chart national cybersecurity maturity & identify areas of concern
- References such as NIST 800-53, COBIT, and Critical Security Controls assist managing cybersecurity risk
- For HIPAA compliant agencies, the survey translates NCSR scores to HIPAA Security Rule scores for an automatic self-assessment tool
- Fulfill justification requirement for cybersecurity investments under the DHS Grant Program
- <https://www.cisecurity.org/ms-isac/services/ncsr/>

Legislative Session Update

6/11/2019

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2019 Session Review

Metrics

- **Agency Request | Bills Tracked**
- No agency bills introduced
- Identified 31 bills for tracking
 - Completed 21 bill analyses
- **Fiscal Notes**
- Completed 58 Fiscal Notes across the agency. (9,111 statewide .064% related to WaTech)
- Majority of these fiscal notes were related to the OCIO and OCS.

2019 Session Review

Bill of Interest

- **SB 5662 | Cloud Computing**

- Prime Sponsor: Guy Palumbo (1st District | Maltby).
- Original bill mandated agencies to adopt cloud based solutions for all future IT and telecommunication investments; required WaTech to conduct a cloud assessment and required agencies to migrate server capacity by June 2023.
- Bill was amended multiple times throughout the session and eventually died on the house floor without a vote.
- WaTech did received 750K to conduct a statewide cloud readiness assessment in the 19-21 biennium.

2019 Session Review

Bill of Interest

- **SB 5376 | Washington Privacy Act**

- Prime Sponsor: Reuven Carlyle (36st District | Seattle).
- Modeled after European Union Privacy Law and California Privacy Act.
- Bill granted consumers the right to access personal data being held by private companies, see how it is being used, make corrections to inaccurate data, and allow for deletion with some exceptions.
- Bill faced opposition from some privacy advocates who thought it did not go far enough in protecting consumers and individual's privacy.
- Bill was heavily amended in both the Senate and the House, but ultimately failed to receive a vote on the House floor.

2019 Session Review

Bill of Interest

- **SB 1503 | Data Brokering**

- Prime Sponsor: Norma Smith (10th District – Clinton).
- Bill granted consumers the right to access personal data being held by private companies, see how it is being used, make corrections to inaccurate data, and allow for deletion with some exceptions.
- Required State Privacy Office to compile a database of data brokers operating in the state.
- Bill died in House Rules Committee.

TSB Subcommittees

Subcommittees – A brief history

- Three subcommittees created in 2013
- Purpose is to effectively meet the Board’s dual strategic/tactical responsibilities
- The monthly subcommittee meetings take care of “roll-up-your-sleeves” type work
- Subcommittees make recommendations to the full board for formal action
- 3-5 members per subcommittee

Portfolio Subcommittee

- Review the state's overall technology portfolio and advise for cross-agency or enterprise-wide collaboration.
- Review and approve major IT projects, and provide ongoing oversight of major IT projects.
 - Combined with Policy subcommittee in 2016
 - Meetings open to the public

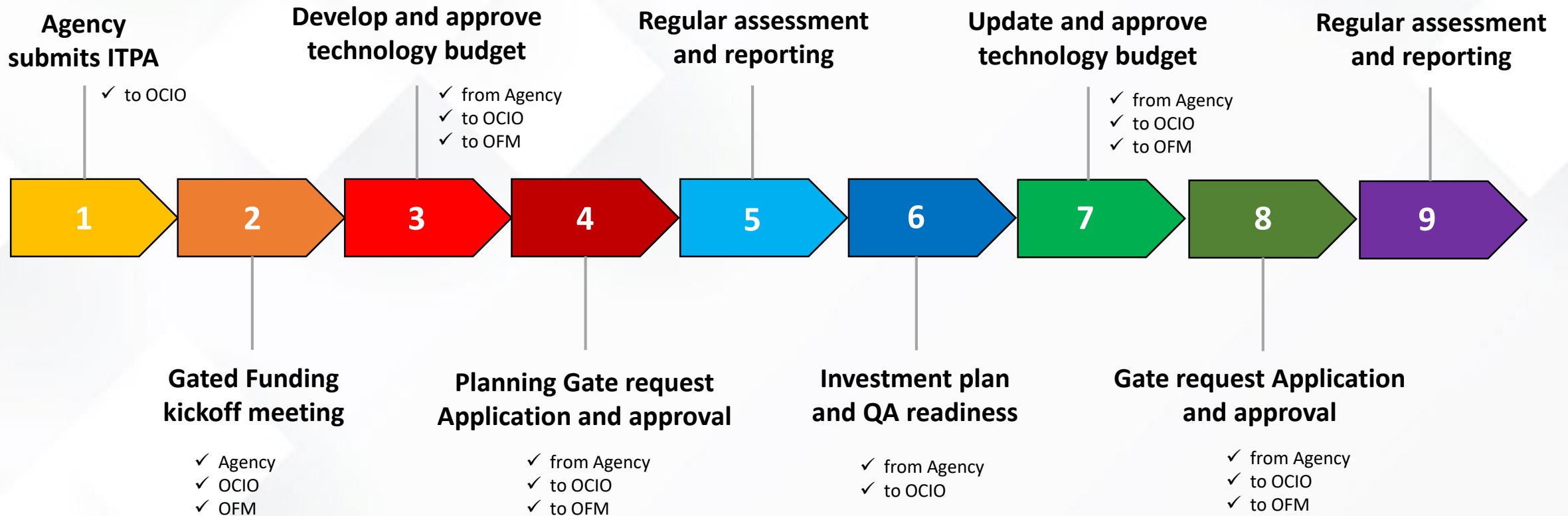
Policy Subcommittee

- Provide advice on the overall state policy framework to ensure a sound balance between flexibility and enterprise cohesiveness.
- Review and approve technology-related policies and standards adopted by the state CIO.
 - Combined with Portfolio subcommittee in 2016
 - Meetings open to the public

Security Subcommittee

- Receive briefings about the state's current cybersecurity program, and current threats and advancements across the globe
- Provide advice and direction on future cyber security initiatives.
 - Very few meetings occurred
 - No meetings since 2016
 - Meetings are not open to the public

Gated Funding Process



Public Comment
