DHS SCIENCE AND TECHNOLOGY

Operational Testing of Agile Programs in a Time of Change at DHS

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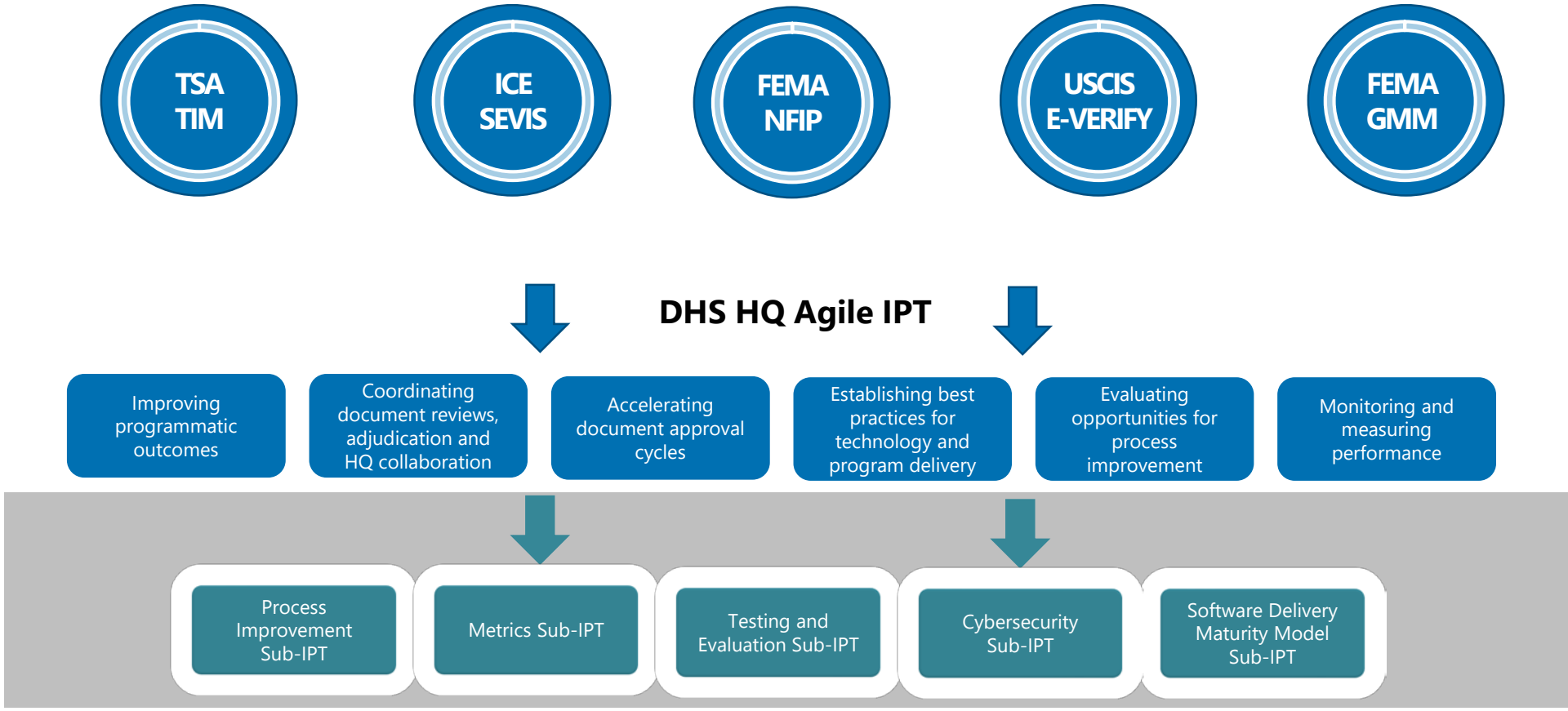
Background

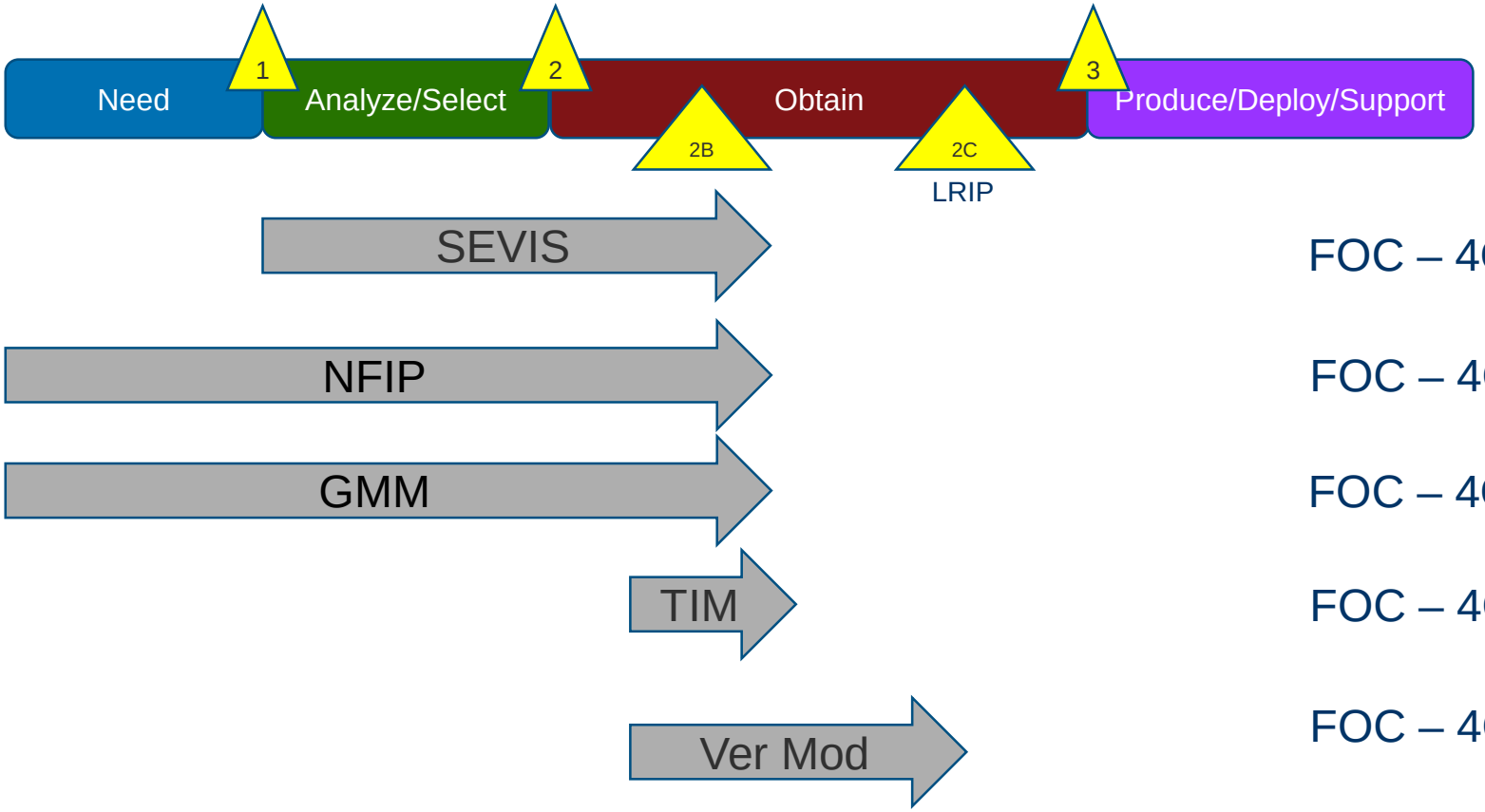
Five Agile development programs identified February 2016:

- ICE – Student Exchange Visitor Information System
- FEMA – National Flood Insurance Program
- FEMA – Grants Management Modernization
- TSA – Technology Infrastructure Modernization
- USCIS – Verification Modernization

Agile Pilots



Where Are They?



FOC – 4QFY20

FOC – 4QFY20

FOC – 4QFY21

FOC – 4QFY21

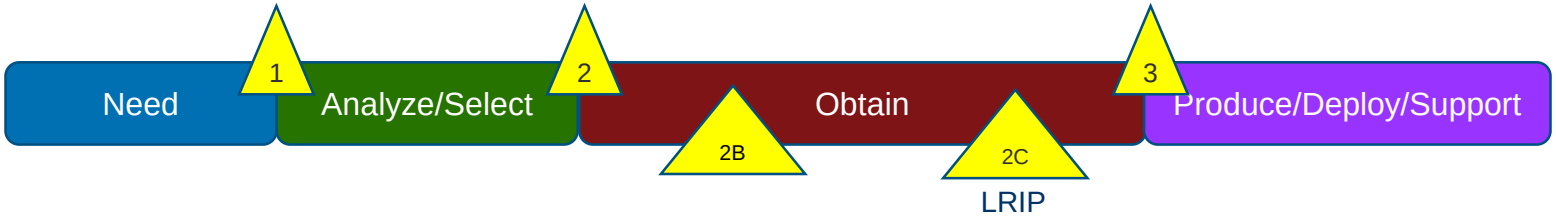
FOC – 4QFY19

Agile – More Testing, More Often

- Programs want to avoid the big IOT&E\FOT&E event
  - Programs will have periodic program reviews

- Operational testers
  - Involved with user story generation (operational view)
  - Operational requirements identified/tagged
  - OTA approval of UAT plan, definition of “done”
  - OTA has a vote at the Release Readiness Review
  - Multiple OA’s through the development to provide status to PM

- Each pilot structures OT a little differently



Agile OTAs

- DHS as a department does not have a centralized OTA
  - Some Components do – TSA, CBP, DNDO
  - Others contract for OTA services

- Contractors with Operational and Agile Test experience are rare
  - Industry often lacks governance and oversight
  - FFRDCs seem expensive to some PMs
  - DOT&E requires OTDs to have Agile training
    - DOT&E provides Scrum Master Certification training opportunities for PMs\OTAs

Growing Pains

- Acquisition Staffing Plans do not include Agile expertise
- “On Loan” expertise is not available to programs from CIO, OSE
- Agile requires commitment across program and acquisition support functions (CPO, Finance, COR, etc.)
- Components disagree on how to implement Agile process
- Agile view of operational requirements
- Agile view of major acquisition documents
- Agile view of Operational T&E, developing a new paradigm for testing with DHS (integrated testing)
- Lack of common terminology for different Agile processes

Risk

- Undeveloped full guidance for the Agile process
  - No common methodology to implement Agile
  - Increased cost
  - Potential breach issues
  - IPTs brought together to develop guidance as programs move forward through the ALF\Agile process
- Experienced OTAs
- Workflow and volume of work for small OTA teams covering multiple Agile development teams
- Increased process time due to OTA inclusion

Questions