Surface Transportation Weather Decision Support Requirements (STWDSR)

Maintenance Decision Support System: Development Plan Options

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Contents

• Axioms

• Options to complete development cycle of the Maintenance decision Support System (MDSS)
  — Risks
  — Costs
Axioms

• FHWA commitment to **one** cycle (through ops test)

• Deployment **will** be through private vendors

• Labs’ products will be available “openly” and they will retain IP

• Vendors will retain their IP

• Bayh-Dole rules (35 USC 200 and 37 CFR 401)
Option A: Current Plan

- **Prototype & Review**
  - Rev1 DOT
  - Rev2 DOT+VAMS
  - Rev3 DOT+VAMS

- **Op. Test System Development**

- **Op. Test & Evaluation**
  - Downselect Partners
  - Voluntary Partners (?)

- **Deployment**
  - Open Components

**Labs & Partners Funding**
- **FY 00 Prototype Award**
  - Labs: $900,000
  - 9/30/00

- **FY 01/02 Op. Test Award**
  - Labs, Partners $900K + $500K
  - 9/30/01

- **Op. Test IOC (Release 1)**
  - 9/30/02

- **Prototype (Release 0)**

- **Release 2**
  - Winter 02/03

- **Deployment**
  - Winter 03/04

**Logistics**
- 9/30/00
- FY01
- 9/30/01
- FY02
- 9/30/02
- FY03
- 9/30/03
- FY04
Option A: Attributes

- **Pro**
  - Fastest possible track to deployment
  - Early, real integration with VAMS

- **Con**
  - Schedule/performance risk of early IOC
  - Minimum time for RFA response
  - Deployment advantage to awardees

- **Costs**
  - As planned for labs ($900K) and partners ($500K)
    - # partners option
  - No added review costs (DOTs) planned
Option B: Extended Demonstrations

- Prototyping & Review:
  - Rev1 DOT
  - Rev2 DOT+VAMS
  - Rev3 DOT
  - Rev4 VAMS

- System Development and Demonstration (Evaluation?):
  - Rev 5 All
  - Rev 6 All
  - Rev 7 All

- Selected Demo Site(s)/Voluntary Partners

- FY 00 Prototype Award Labs: $900,000

- FY 01:
  - 9/30/00
  - FY01
  - FY 01/02 (03?) Labs Funding

- FY 02:
  - 9/30/01
  - FY02
  - Functional Prototype Release 1

- FY 03:
  - 9/30/02
  - FY03
  - F.P. Release 2

- FY 04:
  - 9/30/03
  - FY04
  - Winter 02/03
  - Winter 03/04

- Deployment
Option B: Attributes

- **Pro**
  - Extended development, more mature and integrated Labs’ releases
  - No real-IOC pressure
  - All VAMS (if not all DOTs) brought along equally

- **Con**
  - Avoids real integration issues with VAMS
  - Requires end-end, but stovepipe, demo system

- **Costs**
  - Extended Labs’ costs
    - # demo sites option
  - Added review costs (DOT funding etc.)
Option C: Extended Op. Test

FY 00 Prototype Award Labs: $900,000
9/30/00

FY 01 Award Labs
9/30/01

FY 01

Prototype (Release 0)

Prototype Release 0.1 (presolicitation)

9/30/01

FY 02 Op. Test Award Labs, Partners
9/30/02

FY 02

Rev 5
All

Rev 6
All

Rev 7
All

Op. Test System Development

Op. Test & Evaluation

Deployment

Downselect Partners

Voluntary Partners (?)

Rev 4
All

Rev 3
DOT+VAMS

Rev 2
DOT+VAMS

Rev 1
DOT

Release 1 (integrated)
IOC

Release 2 (integrated)

Winter 02/03

Winter 03/04

9/30/02

9/30/03

9/30/04

FY 03

FY 04
Option C: Attributes

• Pro
  — Extended development, less risk at IOC
  — Gain real integration experience
  — More mature Labs’ products for all VAMS

• Con
  — Downselect excludes some participation
  — Advantage to selected VAMS

• Costs
  — Extended Labs’ (partners?) costs
    — # ops test sites option
    — Added review costs (DOT funding etc.)