



FVAP Views on Solutions & Challenges

**NIST-EAC-FVAP Workshop on UOCAVA Voting Systems
August 6th, 2010**

The Problem is Ballot Return

- **Overwhelming incidence of voting failure is in ballot return because ballots go out too late**

- **Absentee Ballot Return Rates:**
 - **91%** = General Population
 - **67%** = UOCAVA voters

- **Absentee Ballot Delivery Failure Also Problem**
 - 9% military ballots misaddressed
 - 6% returned as undeliverable
 - 17% of military requesting absentee ballots never received it = ~200,000

2008 General Election Results – Military Voters		
Stage of voting process	Number of additional failures over general voting population	% of total failure
Registration Failure	3,936	1.4%
Ballot Delivery Failure	20,064	6.9%
Ballot Return Failure	213,779	74.0%
Ballot Casting Failure	51,283	17.7%
Total	289,062	

Postal Delivery Realities

- **2008 Data: Still Long One Way Delivery Times**
 - September 2008 Priority Delivery
 - USS IWO JIMA – 30.58 days
 - USS THEADORE ROOSEVELT – 28.76 days
 - USS LINCOLN – 22.77 days
 - October 2008 Priority Delivery
 - USS WASP – 28.50 days
 - USS IWO JIMA – 27.50 days
 - USMC CAMP TAQADDUM – 23.74 days
 - **And this is to MPO, not to delivery points down range**

- **MPSA 2008 Ballot Delivery Recommendations Parallel Data**
 - OIF/OEF – 28 days
 - Other overseas – 21 days
 - **These are RETURN recommendations**

- **Unfair to Expect Faster Delivery**
 - The problem is the States haven't sent out the ballots early enough
 - MOVE Act hopefully will address much of this

Internet Voting Mandate

➤ **2002 National Defense Authorization Act**

“The Secretary of Defense shall carry out a demonstration project under which ***absent uniformed services voters*** are permitted to ***cast ballots*** in the regularly scheduled general election ... through an ***electronic voting system***. The project shall be carried out with participation of sufficient numbers ... so that the results are ***statistically relevant***.”

➤ **2005 National Defense Authorization Act**

“...the Secretary may delay the implementation of such demonstration project until the Election Assistance Commission ... has established electronic absentee voting guidelines and certifies that it will assist the Secretary...”

Not the MOVE Act



2002 Committee Reports

➤ 2002 House Report

- "...testing of electronic voting systems that aim to solve the time and distance challenges that have plagued military voters, particularly those residing at overseas duty locations."
- "The Committee expects the Secretary ... to expand the demonstration project to reach **as many military voters as possible.**"
- "The committee believes that the method for absentee voting that holds the most promise for protecting the voting rights of military members in the future is **electronic voting using computers.**"

➤ 2002 Senate Report

- "In the committee's view, the Federal Voting Assistance Program's Voting Over the Internet (VOI) Pilot Project ... demonstrated that ***a remote internet registration and voting system can provide electoral process integrity,***"
- "[The VOI project] provided insight into issues that must be considered for ***broader use of remote registration and voting via the internet.***"
- "The committee encourages ... a judicious and methodical progression from the current by-mail process to a ***secure, easy-to-use, and expedient remote internet registration and voting system.***"

2005 Committee Reports

➤ 2005 Senate Report

- The committee recognizes the effort by the Department of Defense, working in concert with state, county and federal election officials, to bring the **SERVE program** to fruition, and urges continued examination of feasible means to **carry out secure electronic voting**.

➤ 2005 Conference Report

- “***The House bill ... would repeal the requirement ... for the Secretary of Defense to conduct a demonstration project to permit absentee uniformed service voters to cast their ballots through an electronic voting system. The Senate amendment ... would authorize delay in carrying out an electronic voting demonstration project until November 2006. The House recedes with an amendment that would delay the electronic voting demonstration project...***”
- “***The Department of Defense's Secure Electronic Registration and Voting Experiment (SERVE) was an important prototype for electronic voting that should not be abandoned.***”

2007 Laws & GAO

2007 National Defense Authorization Act

- “the Secretary of Defense shall [report] to the Congress ... in ***detail plans for expanding the use of electronic voting technology*** for individuals covered under the [UOCAVA].”
- “...[The GAO shall report to] Congress...the assessment of ...The ***progress of [DoD] and the [EAC] in developing a secure, deployable system for Internet-based electronic voting*** pursuant to [the 2005 NDAA].”

2007 GAO Report

- [DoD should c]reate an ***integrated, comprehensive, long-term, results-oriented plan for future electronic voting programs*** that specifies, ... the goals to be achieved along with tasks including identifying safeguards for the security and privacy of all DOD’s voting ***systems—both electronic and Internet.***
- The plan should also ***specify milestones, time frames, and contingencies;***
- ***Synchronize them with planned development of the Commission’s guidelines for Internet voting;***

2007 FVAP Internet Voting Report

- “**Recommendations for future electronic voting projects include:**
 - **working up to a large scale system** starting with a small number of states or limiting capabilities;...
 - **identifying and mitigating actual and perceived risks** by educating people about risk management practices;...
 - **ensuring that the system will be testable** and that those tests can be reproduced;
 - **developing guidelines for electronic or internet-based registration**, ballot delivery, and voting systems which maintain the integrity of the process;
 - and assessing methods for **voter identification and authentication involving digital certificate technologies.**”

- “A **complete internet voting system would provide:**
 - voter identification and authentication,
 - voter registration,
 - election administration,
 - ballot delivery,
 - voting,
 - tabulation, and
 - results reporting.”

Properties of Electronic Voting System:

Accuracy
Reliability
Privacy
Security
Transparency



FVAP-EAC MOU

➤ Key Planning Factors

- EAC-NIST IAA
 - NIST research on use of electronic technology in absentee voting
 - NIST work with EAC and DoD to select a preferred technology
 - Develop electronic UOCAVA absentee voting standards
 - FVAP given comment opportunity on EAC's direction to NIST regarding draft standards

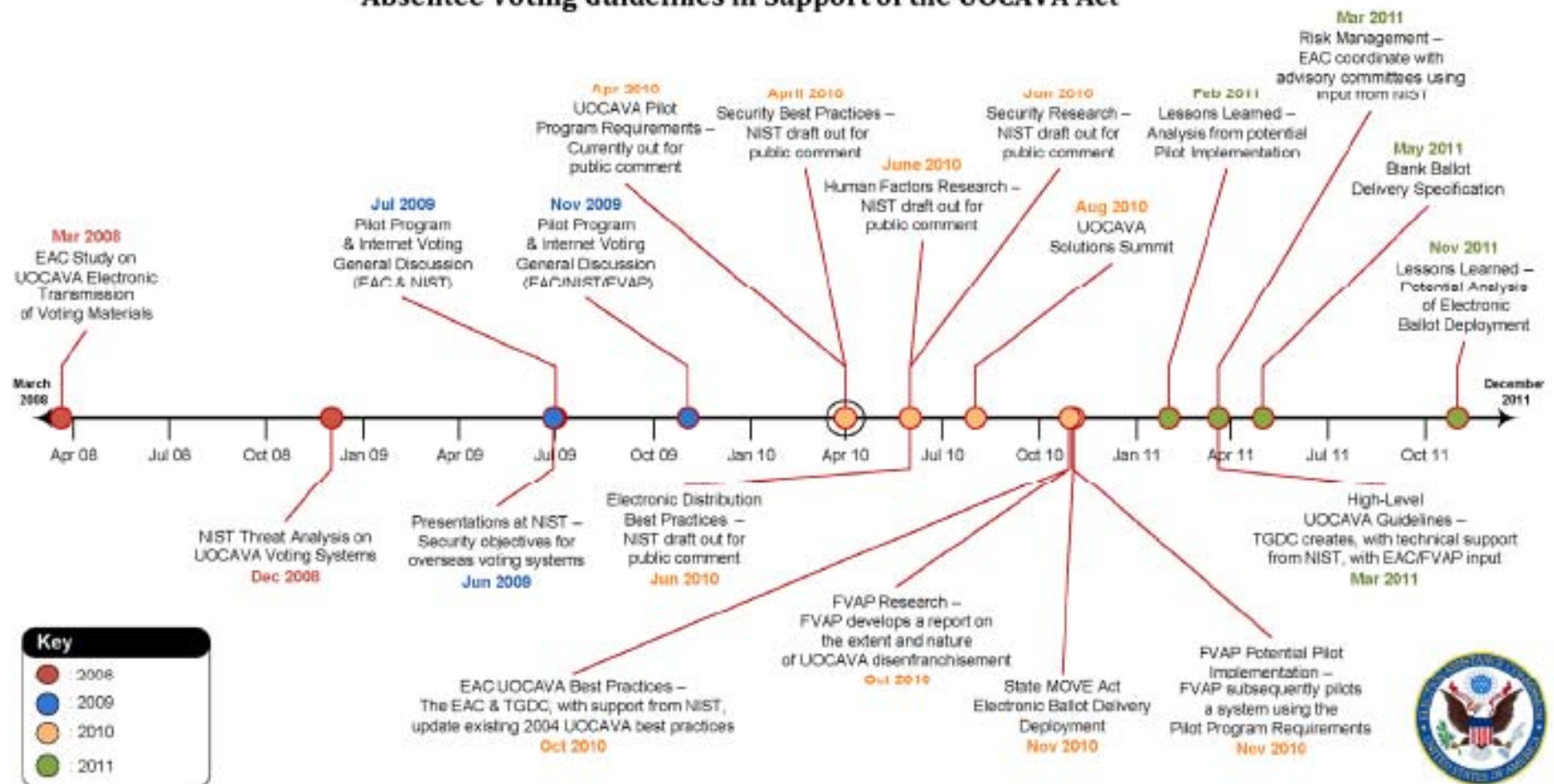
➤ Concept of Operations

- FVAP give EAC info on prior electronic voting projects
- NIST identify one or more ways in which electronic technology can improve UOCAVA absentee voting
- EAC and FVAP identify technologies with greatest utility.
- NIST then develops technical standards, at EAC's direction, to be included in final electronic absentee voting guidelines

Phase	Timeline
Acquire Funding & Concept of Development	6 months
Communications Plan	45 months
Contracting Process	1 month
Design Phase	4 months
Development Phase	15 months
Testing Phase	6 months
System Deployment/Election Official Training	5.5 months
Operations Phase	14 months
Evaluation and Reporting Phase	48 months
Total	48 months

2010 EAC Roadmap

Roadmap Timeline for the Development of Remote Electronic Absentee Voting Guidelines in Support of the UOCAVA Act





FVAP Ideas on Path Forward

Define the Measures

- Acceptable risk level ***policy decision has already been made***
 - It ***IS*** the current voting system
 - Accepts 1/3 of absentee ballots never returned
- ***We should accept equivalent risk in new UOCAVA systems***
 - May have different probability or impact
 - Can reduce probability and/or mitigate impact
 - Goal is to keep risk level at least the same, if not better

Measure Systems

- Use the EAC Risk Assessment Tool & NIST IT Risk Assessment Tools?
- Evaluate the postal mail UOCAVA absentee ballot system as the baseline
- Develop comparable measures for other voting systems and measure them
- **Also examine national level threat risks**

Establish Properties

- What “properties” are necessary for an electronic absentee voting system?
- To achieve the same level of risk as current system
- Even if DON’T believe Properties are technologically feasible

Can You Make the “Washington Declaration”?



FVAP Requested Considerations

- **Put on your scientific game face**
 - Don't make claims that can't be tested and replicated
 - Expertise vs. evidence

- **The policy decision's already been made**
 - Electronic Absentee Voting System Development is the law
 - Federal agencies must execute the law

- **Does the Balkanization of US Election System provide security advantages?**
 - Diversification
 - Defense in Depth
 - Dispersal

- _____ **Independence vs.** _____ **Assurance**

Quotes to Contemplate

- "I think there is a world market for maybe five computers," Thomas Watson, chairman of IBM, 1943.



- "No one will need more than 637 kb of memory for a personal computer—640K ought to be enough for anybody," Bill Gates, Microsoft, 1981.



- "Who the hell wants to hear actors talk?" H.M. Warner, Warner Bros., 1927



Arthur C. Clarke's "3 Laws of Predictions"

- When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong;
- The only way of discovering the limits of the possible is to **venture past them into the impossible**;
- **Any sufficiently advanced technology is indistinguishable from magic.**



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