Minutes of the Public Meeting & Hearing
United States Election Assistance Commission

1225 New York Avenue, NW
Suite 150
Washington, DC 20005

The following are the Minutes of the Public Meeting & Hearing of the United States Election Assistance Commission ("EAC") held on Wednesday, September 2, 2009. The meeting convened at 10:06 a.m., EDT. The meeting was adjourned at 3:38 p.m., EDT.

PUBLIC MEETING

Call to Order:

Chair Gineen Bresso Beach called the meeting to order at 10:06 a.m.

Pledge of Allegiance:

Chair Beach led all present in the recitation of the Pledge of Allegiance.

Roll Call:

EAC Commissioners:

Executive Director Thomas Wilkey called roll of the members of the Commission and found present: Chair Gineen Beach, Vice-Chair Gracia Hillman and Commissioner Donetta Davidson. Three members were present for a quorum.

Senior Staff:

Executive Director Thomas Wilkey; Dr. Mark Abbott, EAC Director of Grants; Brian J. Hancock, Director of Voting System Testing and Certification

Panelists:

James W. Kennedy, Assistant Attorney General, New Hampshire Department of Justice; Steve Pearson, Vice-President of Certification, Election Systems & Software (ES&S); Bernie Hirsch, Director of Software Development, MicroVote General Corp; Dr. Merle S. King, Associate Professor of Information Systems, Executive Director, Center for Election Systems, Kennesaw State

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University; H. Stephen Berger, President of the General Partner, TEM Consulting, LP; Max R. Peterson, II, Area Vice-President, Civilian and Independent Agency Sales, Dell Federal; and Jack Cobb, CTFL, Wyle Labs

Adoption of the Agenda

Chair Beach pointed out two changes in the agenda with regard to the panelists that would be presenting during the public hearing portion of the meeting. Commissioner Donetta Davidson moved to adopt the agenda as amended. Vice-Chair Hillman seconded the motion. The motion carried unanimously.

Welcoming remarks

Chair Beach extended a welcome to all in attendance, after which she reviewed the various conferences that the Commissioners attended during the months of July and August. Chair Beach also reported that the Resolutions that were passed by the Standards Board at its August 6-7, 2009, meeting in Phoenix, Arizona, have been posted on EAC's Website, and that Premier Assure's 1.2 voting system received full accreditation from the EAC. Chair Beach urged anyone interested in submitting comments to the Voluntary Voting System Guidelines (VVSG) Version 1.1. has until September 29, 2009, to do so.

Vice-Chair Hillman and Commissioner Davidson expressed their deep appreciation, remembrance and respect to the late Senator Ted Kennedy for his efforts and support for the Help America Vote Act, in addition to voting rights issues and civil rights issues. Commissioner Davidson also reminded everyone that the National Association of State Election Directors (NASED) has deemed September 2009 as National Voter Registration Month.

Old Business:

Approval of the minutes from the previous meeting

Vice-Chair Hillman moved adoption of the minutes of the July 14, 2009, meeting/hearing, as corrected. Commissioner Davidson seconded the motion. The motion carried unanimously.

Report from the Executive Director

Mr. Wilkey acknowledged the late Senator Ted Kennedy's many accomplishments, extending EAC's deep sympathy to both his family and staff in Washington for their loss.

Mr. Wilkey extended a welcome to everyone in attendance, providing the following update on activities that have occurred since the July 14, 2009, public meeting/hearing:

Regarding Voting System Testing and Certification, the following two additional systems were recently certified: ES&S Unity 3.2.0.0 and Premier Assure 1.2, for which the final test reports, Certificates of Conformance and EAC's final decision to grant certification have been posted to the Website for review. Also recently posted are Unisyn's OpenElect Voting System Draft Test Plan revisions A and B, and EAC's approval of revision B. Everyone Counts has successfully registered to participate in the Testing and Certification Program. A Request for Interpretation of the 2005 VVSG regarding alternative languages and an updated list of states that require some degree of testing and certification to federal voting system standards have been posted to the Website.

Regarding Requirements Payments, $39.3 million of the $115 million of 2008 funds and $9.1 million of the $100 million in 2009 funds have been disbursed to date. States can apply for both '08 and '09 funds simultaneously, and two Funding Advisory Opinions (09-006 and 09-007) dealing with voter education programs and voting system maintenance training were recently issued.

Regarding Grants, applications for the College Poll Worker Grant Program are being reviewed and awards for the Mock Election Grant Program will be announced in the very near future. A 45-day comment period for grants to fund research on accessible voting technology and the development of pre-election logic and accuracy testing and post-election audit processes which began September 1 will continue through October 15, 2009. A roundtable at Gallaudet University, which is open to the public, will be held on October 13th to discuss accessible voting technology.

Regarding Research, Policy and Programs, a virtual public forum from September 9-18 will be held to accept comments from both the Standards Board and Board of Advisors on five new Election Management Guidelines chapters that cover Building Community Partnerships, Canvassing and Certifying an Election, Communicating with the Public, Conducting a Recount and Provisional Ballots. Both the documents and comments will be open to the public during and after the virtual meeting for their review.

Under NVRA, the FEC voted during its July public meeting to transfer the NVRA regulations to EAC, a transfer notice was published in the *Federal Register* on July 29, 2009, and the transfer became effective August 28, 2009.

Under Other News, EAC is seeking qualified scientific and technical experts to serve on its Technical Guidelines Development Committee (TGDC) for which both the process and positions have been posted on the Website. EAC has launched a YouTube channel at YouTube.com/helpamericavote which features educational and training videos on polling place management and accessibility, contingency planning and the federal voting system testing and certification process.

Questions and Answers:

In response to Vice-Chair Hillman's inquiry into the status of the recommended items pertaining to the reaccreditation of iBeta and System Lab, which was discussed at the July 14, 2009, public meeting/hearing, Mr. Wilkey commented that he would be updating the Commission at its next meeting on this matter and he would also inquire into when this information would be posted to the Website. In response to Vice-Chair Hillman's question regarding when the naming of the revisions and updates to the VVSG which is currently being called Version 1.1 would occur, Mr. Wilkey commented that a final decision would be made following the conclusion of the public comment period.

Chair Beach acknowledged the presence of Bob Kerry, Director, Federal Voting Assistance Program (FVAP), commenting that the EAC looks forward to working with him in the future.

New Business:

Update on Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) Activities

Brian J. Hancock, Director of Voting System Testing and Certification, addressed the Commission to provide an update on what EAC and its partners, the National Institute of Standards and Technology (NIST) and FVAP, are doing to assist uniformed and overseas citizens voting by absentee ballot in accordance with the following: The Military and Overseas Voter Empowerment Act, the National Defense Authorization Act, a 2006 requirement by Congress that the Department of Defense (DOD) report on plans for expanding its use of electronic voting technologies and required

the Government Accountability Office to assess efforts by the EAC to develop Internet voting guidelines and by DOD to develop an Internet-based demonstration project, and a 2007 report issued by GAO entitled "Action Plans Needed to Fully Address Challenges in Electronic Absentee Voting for Military and Overseas Citizens." Mr. Hancock pointed out EAC, along with NIST and FVAP, are in the beginning stages of exploring concepts, potential implementations, the development of testable requirements and the development of special certification requirements to assist state and/or local election jurisdictions who wish to pursue pilot projects to allow various methods of remote electronic voting for its UOCAVA voters. The initial concept is to develop a manageable, small-scale effort that would be usable for UOCAVA voters, perhaps, as early as the 2010 federal general election, with further larger scale pilot projects in the 2012 federal election. The most likely initial system implementation would be a manned kiosk, similar to that used in the Okaloosa County Florida pilot project.

In addition, NIST is working on compiling three separate documents related to UOCAVA issues, the first, titled "Security Considerations for Remote Electronic UOCAVA Voting Systems" which is scheduled for delivery to the EAC in December 2009, and two other documents tentatively titled "Best Practices on Electronic Transmission of Election Materials" and "IT System Security Best Practices for UOCAVA Supporting Systems," which are scheduled for delivery to EAC by early 2010.

Mr. Hancock pointed out that the EAC may want to consider hearing testimony directly from FVAP and NIST regarding their efforts related to UOCAVA voters at a future date.

Questions and Answers:

In answer to Vice-Chair Hillman's question concerning the timing of the work that EAC is doing versus what FVAP has been directed to do under an appropriation from Congress, Mr. Hancock pointed out that while FVAP is the lead agency, EAC has certain requirements that it must meet, and will be working with NIST to get their best scientific and academic input possible. Given the time constraints and the needs of FVAP, it will probably be best for EAC and FVAP to do things in parallel, as much as possible. In response to Vice-Chair Hillman's inquiry into what observations Mr. Hancock gathered from a recent working group that was convened to discuss a possible pilot project pertaining to UOCAVA voters, he stated the entire day was spent discussing what the scope of the project should be. In response to Vice-Chair Hillman's question

with respect to whether EAC is required to complete something prior to the Department of Defense carrying out its pilot project in accordance with the language in the appropriation which reads, "After the Election Assistance Commission notifies the Secretary of Defense that the Commission has established electronic absentee voting guidelines and certifies that it will assist the Secretary in carrying out the project," Mr. Hancock noted that consideration may want to be given towards seeking an exact determination from the legal departments from both EAC and FVAP on this language. Vice-Chair Hillman's final inquiry regarding whether more recent legislation supersedes the revised language in the Defense Authorization Act, Executive Director Wilkey noted that he would follow-up on this matter.

In response to Chair Beach's question regarding how the guidelines that NIST is preparing, scheduled for delivery to the EAC in December '09, will better serve UOCAVA voters, Mr. Hancock pointed out the document will be at a fairly high level that will serve as a roadmap and outline what systems should look like, some of the security requirements of the systems and how these systems can be implemented. In response to Chair Beach's final inquiry into what is being done to involve various individuals in the three documents that NIST will be preparing related to UOCAVA issues, Mr. Hancock explained that as many stakeholders and election officials as possible would be involved in the process.

Panel Discussion of July 19, 2009, NASS Resolution on Help America Vote Act of 2002 (HAVA) Grant and Payments Distinction

Executive Director Wilkey provided a chronology with respect to what formed the basis for the opinions that the EAC has relied on and the actions that the Commission has taken with respect to the treatment of HAVA funds, particularly with regard to the characterization of requirements payments as grants.

Panelist:

James W. Kennedy, Assistant Attorney General, New Hampshire Department of Justice, addressed the Commission to provide testimony in support of the National Association of Secretary of States' (NASS) resolution, which passed by unanimous consent on July 19, 2009, regarding grant and payment distinction. Mr. Kennedy also provided testimony/argument addressing EAC's auditing function of states in accordance with Section 902(b) of HAVA.

Panelist:

Dr. Mark Abbott, EAC Director of Grants, addressed the Commission to provide additional follow-up on the chronology, as presented earlier by Executive Director Wilkey, and to also outline the basis for the decisions that were made regarding the characterization of requirements payments as grants.

Questions and Answers:

Vice-Chair Hillman asked whether other state Counsels have written opinions on the resolution passed by NASS, Mr. Kennedy stated that he was not aware of any such opinions. In response to Vice-Chair Hillman's question into what EAC may be doing to prevent New Hampshire from spending its HAVA funds and thereby impinging its ability to improve the administration of federal elections, Mr. Kennedy cited an audit conducted of New Hampshire by the Legislative Budget Assistant (LBA) who raised questions with respect to the applicability of OMB Circular A-87 as it pertains to the HAVA function that the Secretary of State performs. In reply to Vice-Chair Hillman's inquiry into what his reaction is regarding the fact that no federal entity has directed the EAC to "stop auditing the states," while Mr. Kennedy acknowledged EAC's permissible auditing role, he requested that the Commission stay within the bounds of Section 902 of HAVA when conducting audits. In response to Vice-Chair Hillman's final inquiry into what implications there would be if EAC affirmed the resolution relative to the distinction between payments and grants, Dr. Abbott replied that one single standard on which to audit these funds against would be absent.

Commissioner Hillman expressed concern that the National Association of Secretaries of State (NASS) did not send a transmittal letter to EAC when it sent the resolution, which is being discussed at today's meeting. She expressed further concern that NASS chose to not send an official representative to speak to the resolution. Commissioner Hillman stated her understanding that Secretary Gardner of New Hampshire was the author of the resolution and that NASS had indicated it would be okay for him to speak to the resolution, yet he chose to not attend. Commissioner Hillman expressed concern that Secretary Gardner would not appear before EAC to speak to his own resolution but rather sent a representative who is not even a member of NASS.

Chair Beach pointed out that she was provided with a copy of the NASS resolution via email from the Executive Director, Leslie Reynolds.

In answer to Commissioner Davidson's inquiry into what was found as a result of the New Hampshire's audit by the LBA, Mr. Kennedy commented that there may have been a non-compliant issue concerning OMB A-87 relative to a capital expenditure in excess of $5,000 without getting preapproval. On Commissioner Davidson's final question into whether there are any organizations within New Hampshire that can be consulted to see how other agencies that receive federal money handle the reporting of their obligations, and being prepared for audits, and what rules/regulations they fall underneath, Mr. Kennedy commented it is his belief they would fall under any appropriate state of federal law that would apply to any appropriation, whether it would be a grant or a payment, that was made to that agency.

In response to Chair Beach's inquiry into what oversight role, if not for audits, he envisions EAC playing with respect to HAVA funds, Mr. Kennedy acknowledged EAC's permissible auditing role under Section 902 of HAVA, commenting that the EAC needs to be reviewing whether or not the states are doing good with the federal money that they're receiving in accordance with HAVA or in accordance with the rules that apply to the expenditure of those funds, and also stated that rules shouldn't be interchanged and terms shouldn't be interchanged, but that grants and payments should be treated as separate and distinct concept and terms. In response to Chair Beach's inquiry into how other provisions of HAVA, i.e., maintenance of effort or the five percent match, would be impacted if payments are not viewed as grants, Dr. Abbott explained that states would still be held accountable to every other part of the statute, whether or not EAC followed OMB's previously issued Circulars pertaining to federal funds. On Chair Beach's final question regarding whether he has ever seen a category for federal funds in light of his experience in federal funding assistance programs, Dr. Abbott commented, in his personal experience he is not aware of any. In addition, Dr. Abbott acknowledged that while New Hampshire is right in pointing out a discrepancy, this is something that needs to be addressed between the appropriators and the authorizers.

[The public meeting recessed at 11:46 a.m., and reconvened at 1:05 p.m.]

New Business: (Cont'd)

Hearing: Use of Commercial Off-The-Shelf (COTS) Products in EAC Certified Voting Systems

Brian J. Hancock, Director of Voting System Testing and Certification, addressed the Commission to provide some background information for some of the COTS issues that would be discussed by the panelists, which included the definition of COTS as set forth in the 2005 VVSG, an overview of why it was determined that the issue of COTS needed to be brought forth to the Commission in a hearing format, and an outline of several options that EAC may want to consider exploring in order to mitigate potential obsolescence and incompatibility issues while keeping testing and certification costs to a minimum.

Panelist:

Bernie Hirsch, Director of Software Development, MicroVote General Corporation, addressed the Commission regarding the use of COTS hardware and software in voting systems, with an emphasis on PC's, pointing out some of the challenges/impacts, which would include a significant increase in costs and delays that would prevent systems from reaching customers. Mr. Hirsch pointed out that producing products that are certain to be of "commercial value" is a challenge, there needs to be a fundamental change towards expediency and common sense in the testing and certification process, emphasized the fact that there is a desperate need for public or private funding to continue research and development of current and new products, to stop pushing paper around and get to work for the American people.

Panelist:

Steve Pearson, Vice President of Certification, Election Systems & Software (ES&S), addressed the Commission to encourage that it consider the following key factors before making a final determination regarding the use of COTS hardware/software:

1. The EAC should recognize that jurisdictions desire to use the computing equipment they currently have. Counties and states are virtually all financially burdened. With the advent of HAVA, most jurisdictions across the country have made major investments in their IT infrastructure in the past two to three years. Adoption of an EAC requirement to only permit specific PC brands and models that were used in certification testing will likely obsolete their current equipment.

2. The number of brands and models of PC's is a very, very long list. To try to qualify all brands and models is overburdening to the certification process with little or no benefit. It is important that the value of the task is commensurate to the effort in cost, time and risk.

3. Should the EAC determine only specified PC brands and models used in the certification testing can be used in county deployments, how would each respective PC manufacturer be held accountable for ongoing hardware engineering change orders (ECOs) to the certified models? Given the fluid nature of electronics manufacturing, hardware change orders are very frequent, primarily due to end-of-life components, step changes in components by the sub-component suppliers, and suppliers going out of business. Would COTS hardware manufacturers be obligated to report such changes as they occur? Who would they report them to? What would the validation process be for such changes? Should the EAC adopt this approach, it should be the responsibility of the EAC to perform such validation. If the EAC chooses a path that certifies only the specific makes and models, are they also going to specify each of the peripherals, for example keyboards, monitors, mice, CD brands, routers, switches, USB hubs, power cords, power strips, and even mouse pads?

4. For its election management software environments, ES&S utilizes Microsoft Windows and only Windows compliant COTS drivers to be run on only Windows approved platforms. The Microsoft Windows operating system is the insulator to the hardware. Windows is the insulator to making the hardware all operate the same way.

5. The length of time required to complete a certification is another key factor for the EAC to consider regarding this matter. What was considered a state-of-the-art PC technology at the start of the certification is most likely no longer considered state-of-the-art or the most efficient, both in cost and performance, nearly two-and-a-half years later.

6. What would an EAC policy that specifies makes and models of COTS PC's, servers and peripheral equipment lead to? Such a policy would force us to abandon the

COTS PC solution and leave the voting system providers producing proprietary designed and manufactured PC's, which would allow us to control the hardware and engineering change orders. A custom ES&S would be a $10,000 PC.

Panelist:

Max R. Peterson, II, Area Vice President, Civilian and Independent Agency Sales, Dell Federal, addressed the Commission to provide testimony on the benefits of using COTS hardware, to explain the various aspects/features of Dell's business class desktop systems (OptiPlex) and Dell's business class notebooks (Latitude) and to outline the following areas with regard to COTS that the EAC should take into consideration:

1. Clear delineation of voting system applications and the COTS platform.

2. Allowing independent software vendors/independent solution vendors (ISVs) to validate compatibility versus a recertification when just the underlying COTS platform is changing.

3. Establishing a periodic monthly research exercise in order to understand where the current trends/directions are in terms of technology and how they apply to voting systems.

Questions and Answers:

In response to Vice-Chair Hillman's question regarding what Mr. Hirsch meant when he referred to MicroVote's accomplishment of being the first to achieve federal certification by the EAC "has come at too great a cost," Mr. Hirsch pointed to both the increase in costs and time that it is taking under the current testing and certification program in comparison to when NASED was doing the testing and certification. Vice-Chair Hillman asked what Mr. Hirsch meant by "commercial value," he explained he was referring to profitability. In response to Vice-Chair Hillman's inquiry concerning whether either himself or other individuals from his company have approached Congress about the need for funding research and development of new products, Mr. Hirsch replied that although this was never raised with Congress he did approach his company regarding the language in HAVA which allocates that $20 million be given to voting system manufacturers for the funding of research and development but was advised there is no system in place to apply

for these funds. Vice-Chair Hillman noted that, while Congress authorized that money, they have only recently appropriated $5 million to specifically address accessibility, and that will be coming soon.

On Vice-Chair Hillman's inquiry into what is the most expensive laptop that Dell produces and what it's used for, Mr. Peterson explained this would be the Precision line, which are high-performance, portable work stations and that, depending on how they are configured, could cost in the area of $10,000.

Commissioner Davidson's question to Mr. Hirsch with respect to what is making MicroVote's attempt to revise an EAC certification so difficult, he commented this may be a better question left to Mr. Cobb of Wyle Labs, and further pointed out that states are indicating they are content with their current voting systems, and therefore, there has not been the need/desire for its certified product. In response to Commissioner Davidson's question as to whether a vendor checks with the manufacturer to ascertain what the expected lifespan of a voting system will be, Mr. Pearson and Mr. Hirsch commented that, generally, the vendor does not dictate to its customers which PC platforms they are required to purchase, but rather, provides them with a minimum set of specifications.

In response to Chair Beach's inquiry, Mr. Pearson explained that COTS, as it relates to voting systems, comprises the software, hardware and firmware. Chair Beach's next question with respect to what is taken into consideration with regard to patches, regular or emergency, when manufacturing a system, Mr. Pearson explained that typically ES&S does not make major upgrades very often, due to the fact that ensuring systems are upgraded properly is a very long process, which involves time and money. He also pointed out that a way needs to be found to narrow the window, in order to accommodate changes from COTS providers, because it is difficult for vendors to keep up with the current pace. In response to the same question, Mr. Hirsch replied that the same standards for thoroughly reviewing/testing changes made to propriety software should not be applied to COTS software. In response to Chair Beach's inquiry as to when Dell no longer provides support for end-of-life for a PC, Mr. Peterson pointed out that while this would depend somewhat on the model and the machine, Dell provides its customers with significant advance notice, in terms of end-of-life, in addition to warranty, maintenance and support even after the product is not a current model. Chair Beach's final inquiry with respect to what Dell does to provide good customer support in today's atmosphere of constant hardware and software upgrades,

Mr. Peterson pointed out there are two tools that Dell provides to accomplish this, ImageWatch and ImageDirect.

Executive Director Wilkey asked if Mr. Hirsch is aware, in light of his experience as a commercial airline pilot, whether the airline industry must meet criteria, similar to the VVSG for voting systems, when updating hardware/software in their computer systems, Mr. Hirsch explained that any changes in an aircraft must comply with an airworthiness directive that is issued by the FAA. In response to Mr. Wilkey's final question into who performs compatibility validation, Mr. Pearson explained that the industry software vendors would be responsible for certifying compatibility; they are the ones who understand their application and what it's supposed to do.

To Commissioner Davidson's follow-up question, on whether EAC could be provided with a list of each county that is utilizing each specific version of ES&S equipment, Mr. Pearson replied in the affirmative.

[The Commission recessed at 2:23 p.m., reconvening at 2:32 p.m.]

Hearing: Use of Commercial Off-The-Shelf (COTS) Products in EAC Certified Voting Systems (Cont'd)

Panelist:

Jack T. Cobb, CTFL, Wyle Labs, addressed the Commission to provide testimony, which included an overview of Wyle Lab's involvement with voting systems, a description of the two classifications of COTS components, a discussion of the various "pros" and "cons" for a voting manufacturer to use COTS components, a description of the types of testing a voting manufacturer performs on COTS, an overview of the two functions that COTS PCs and laptops serve in the voting system architecture, to point out there are three EAC-suggested methods for testing in order to lessen potential risks and minimizing testing and certification costs, which were detailed in his written testimony, and to also suggest that consideration be given to an installation test on the replacement model, and performing a minimum performance test for which the details could be documented by the EAC as an RFI.

Panelist:

Dr. Merle S. King, Associate Professor of Information Systems, Executive Director, Center for Election Systems, Kennesaw State University addressed the Commission to provide testimony pertaining to what the State of Georgia has experienced with the use of COTS components in its uniform voting system, the impact that COTS components has on the certification and recertification of voting systems and to recommend, given the volatility of change in COTS components, that voting system manufacturers place COTS components at the periphery of the architecture, not at the core.

Panelist:

H. Stephen Berger, President of the General Partner of TEM Consulting, LP addressed the Commission to provide testimony pertaining to the basis for exempting COTS components from testing, an overview of the four categories of COTS (special qualifications COTS, internationally marketed COTS, special market COTS and semi-custom COTS), to outline the two categories of risks with the use of COTS components and the steps that could be taken to mitigate these risks.

Questions and Answers:

Vice-Chair Hillman asked whether Wyle Labs verifies that, in fact, a PC/laptop has been tested or certified to meet basic or minimum requirements, Mr. Cobb explained that Wyle adheres to EAC's published Request for Interpretation (RFI) "2007-05 Testing Focus and Applicability." In response to Vice-Chair Hillman's question regarding what is contributing to the major costs for testing and certification, Mr. Cobb pointed to two major areas, the first being the review of technical documentation, and the second being the source code review that goes into a system. He also pointed out that the increased cost of testing hardware is due, in large part, because labs must be accredited to a higher standard, which is generating a lot more overhead than there was under the NASED process.

In response to Vice-Chair Hillman's question regarding what some of the contributing factors have been with respect to Georgia's certification of voting systems, Dr. King explained that while Georgia has not experienced the same level of cost as described by the other panelists, due to the fact that it has not done a full certification on a system since 2002, he commented that one area that is much more extensive are source code reviews. He also pointed out that if Georgia moves to a new system, which would

require EAC certification, he could easily envision a doubling of the costs, given the change in scope of the 2005 VVSG versus the 1990 VSS. Dr. King further noted he believes it would be possible to cost out actual dollars versus projected costs for a new system, what the increased costs of a new system would be, and the contributing factors for increased costs.

In answer to Commissioner Davidson's question as to what the contributing expenses are in order to receive NVLAP accreditation, Mr. Cobb explained that documenting to the level of the 17025 lab standards are extremely time consuming and difficult. Commissioner Davidson asked what Mr. Cobb's recommendation would be with respect to the use of COTS PC's in voting systems, he stated he envisioned the replacement PC being drop-shipped to a VSTL, who would perform a compatibility test, which he noted should be minimal, both in cost and time.
In response to Commissioner Davidson's question regarding how Georgia controls its 159 counties from independently changing out a COTS product, Dr. King explained that this was envisioned in the rollout of the system, and there are changes contemporaneous in the State Election Board rules that would make it a felony for a jurisdiction to run a non-standard system. In reply to Commissioner Davidson's question as to what Dr. King's recommendation would be with respect to the use of COTS PC's in voting systems, he pointed out it would be important for manufacturers of systems to identify the most stable and sustainable configuration.

Commissioner Davidson asked what Mr. Berger's recommendation would be with respect to the use of COTS PC's in voting systems, Mr. Berger agreed with both Dr. King and Mr. Cobb's suggestions, in addition to recommending that consideration be given to (1), working with the PC vendor and the voting system vendor to draw as liberal a circle as possible without introducing inordinate risk; and (2) work with the PC vendor to understand their roadmap, particularly their fundamental technology roadmap, and do forward planning in order to avoid surprise changes, which could be accomplished through a quarterly conversation/meeting.

In response to Chair Beach's question as to what challenges COTS presents to Georgia's election officials, Dr. King pointed out the largest challenge is the fear that the COTS manufacturers will simply choose to discontinue making certain products or go out of business.

Chair Beach asked how other federal certification entities approach COTS, Mr. Berger explained that this has been accomplished in the

cellular phone industry through compatibility approaches, and in the financial industry by means of a model-driven architecture. In response to Chair Beach's final question as to what differences in the COTS standards they have gathered from the 2002 VSS and the 2005 VVSG, both Mr. Cobb and Mr. Berger pointed out they are very minimal, if any. Both Mr. Berger and Mr. Cobb confirmed that the Next Iteration provides a much clearer definition of COTS standards, more so than the 2005 VVSG does.

In response to Commissioner Davidson's follow-up question to Dr. King regarding how Georgia handles a COTS change, Dr. King explained that not only is it sent back to the lab for testing, but that the change is also tested at the state level.

In answer to Mr. Wilkey's question as to whether there is a difference in what Wyle charges for its testing of voting systems versus what it charges other industries, Mr. Cobb explained that Wyle utilizes a firm-fixed price on a success-based system, with baseline quotes in the area of $500,000 to $800,000. He also stated that there are exceptions for some of the larger, more complex systems.

Commissioners' Closing Remarks

Chair Beach thanked all the panelists for their input, which she noted was both healthy and informative. Vice-Chair Hillman extended her appreciation to the panelists for all of their hard work, in addition to their discussions with the Commissioners and EAC staff. Commissioner Davidson thanked the panelists for participating, noting that their input will be of great educational value to the election world.

Chair Beach concluded by announcing that the next public meeting of the EAC would be held on October 8, 2009.

The Public Meeting and Hearing of the EAC adjourned at 3:38 p.m.