

Juliet E. Thompson/EAC/GOV To: CSBurkhardt@DOC.GOV/GSAEXTERNAL
03/31/2005 07:52 AM cc
bcc
Subject: Re: Will have ANSI replacement vetted by Tuesday

Craig,

I have notified Commissioner Martinez, who is the DFO for the TGDC this year. I will work on the [REDACTED] issue today.

Juliet E. Thompson
General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste. 1100
Washington, DC 20005
(202) 566-3100
CSBurkhardt@DOC.GOV



CSBurkhardt@DOC.GOV
03/30/2005 02:43 PM To: jthompson@eac.gov
cc
Subject: Will have ANSI replacement vetted by Tuesday

Juliet:

We will have the vetting done on David Karnol (the ANSI replacement) on Tuesday next week. I can arrange for Semerjian to agree to the appointment immediately thereafter, and then it is just a matter for you to get assent from the EAC and issue the invitation. We can also have Hatch make the invitation, if the EAC prefers.

I know you are busy, but the EAC needs to determine if it wants to replace [REDACTED] in advance of the April meeting. [REDACTED] is ill [REDACTED] and has asked for a "leave". Unfortunately, there is no flexibility for someone to vote or meaningfully participate in her place during the meeting, so I suggest that we replace [REDACTED] with the understanding that the replacement will resign and [REDACTED] will be reappointed when [REDACTED] wants to return. [REDACTED] We can vet this person very quickly, if you wish.

Regards,
Craig
202-492-4620

018956



Paul DeGregorio/EAC/GOV
04/20/2005 10:00 AM

To Carol A. Paquette/EAC/GOV, Gavin S. Gilmour/EAC/GOV,
"Craig Burkhardt" <CSBurkhardt@DOC.GOV>
cc Juliet E. Thompson/EAC/GOV, Gracia Hillman/EAC/GOV,
Raymundo Martinez/EAC/GOV, DeForest Soaries
Jr./EAC/GOV

bcc

Subject Replacement of TGDC member

This morning, moments before the TGDC meeting was to begin, I was approached by David Karmol, who indicated that he was the replacement for Anne Caldas, who resigned as the American National Standards Institute (ANSI) representative on the TGDC about two months ago. Mr. Karmol said that the letter from ANSI to the EAC/NIST appointing him as the replacement for Ms. Caldas was sent concurrently with Ms. Caldas resignation. I do recall seeing a copy of the resignation and replacement letters.

Needless to say Mr. Karmol was very upset that his paperwork was not processed in a timely manner so that he could participate in this very important meeting of the TGDC. He pressed me on the status of his paperwork and I could not give him an answer because I had no idea.

It was an embarrassing incident. As the Federal Officer for the TGDC I should have been kept in the loop and should have had an adequate answer for Mr. Karmol.

Mr. Karmol's paperwork should have been processed in an expedited manner so that he could have participated in this meeting. The fact that it was not shows that there is a serious communications and process breakdown somewhere that must be fixed. I should have been kept better informed by staff on this important matter and will insist that they do so in the future.

Paul DeGregorio
Vice Chairman

Sent from my BlackBerry Wireless Handheld

018957



CSBurkhardt@DOC.GOV
04/21/2005 10:15 AM

To: jthompson@eac.gov, ggilmour@eac.gov
cc
bcc

Subject ANSI TGDC appointment

Dear Julie and Gavin:

I started today downtown and retrieved the appointment and resignation documents. They were refaxed to Gavin at his request just a few moments ago. My records show that Juliet and I telephoned and e-mailed about this in March before her vacation, during which I agreed to get the resignation/appointment letters, and perform a "basic" ethics vetting. I faxed the letters on March 29, and the vetting was completed on April 5. I communicated successful passage of the vetting and Semerjian's assent to the appointment during phone conversations with Juliet, Carol and Gavin later that week, and early the week of April 11. I also spoke with Carol about the Turner-Bouie matter, and she related the EAC would not seek to replace her at this time.

On April 12, I spoke very briefly with with Caldas and Karmol, and informed them to contact Carol if there were any questions regarding when the EAC would act to issue an appointment letter. When EAC is ready to act, all it needs to do is issue the same appointment letter used during the original round of appointments. I don't have copies of those letters, but I recall they were very summary in nature.

Gavin mentioned wanting to see a resume on Karmol in his voice mail to me this morning. Consistent with our agreement that EAC recommends and reviews the organization-specific members and NIST recommends and reviews the at-large members, NIST neither requested nor reviewed any such documents on Karmol. The basic ethics vetting only picks up ethical difficulties from our database and personnel review.

Let me know if you have any questions. I am going back out to the hearing now, so call my cell if you have a priority question. Otherwise, I'll be in the office tomorrow.

Finest Regards,
Craig

018958

Carol A. Paquette/EAC/GOV
04/21/2005 02:59 PM

To Gavin S. Gilmour/EAC/GOV@EAC
cc
bcc
Subject Re: ANSI TGDC appointment

I'll ask him today (the ANSI guy) to send me a resume. Thanks!

Sent from my BlackBerry Wireless Handheld
Gavin S. Gilmour

From: Gavin S. Gilmour
Sent: 04/21/2005 11:53 AM
To: Carol Paquette
Cc: Juliet Thompson
Subject: Fw: ANSI TGDC appointment

Carol,

Regarding the e-mail below.

I have some questions regarding his recollection. I obviously can't speak to anything that occurred regarding this matter before last week, However, I do know that neither Julie nor myself were involved in a group call on the 11th.

Such issues aside...

I have only spoken to the man once (alone), on or about the 12-13th of April. Per my notes, I wanted four things from him. (1) a Resume or other info on qualifications, (2) Letter from ANSI, (3) Letter from Nist (which he noted may be in a casual form like an e-mail) and (4) an Example appointment letter (if he could find one).

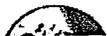
I have not received the above information as of yesterday.

As for the information he faxed today, it contains only two NIST letters (1 resignation letter and 1 appointment letter). In my opinion it is missing the most important part, a letter from NIST approving the candidates. HAVA requires that the candidates be approved by both NIST and EAC. We cannot issue the candidate a final appointment letter unless we have documentation that he is NIST approved. Perhaps we may hold that the various conversations and the e-mails below constitute such confirmation. I leave that matter to you. Finally, I would note that if NIST will provide no background info on the applicant, how are we to send this matter to a tally vote (and how did they approve the person)? We would be asking the Commissioners to approve an individual for the board based solely on a three sentence ANSI representation letter.

GG

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005
(202) 566-3100

----- Forwarded by Gavin S. Gilmour/EAC/GOV on 04/21/2005 10:51 AM -----



CSBurkhardt@DOC.GOV

018959



04/21/2005 10:15 AM

To jthompson@eac.gov, ggilmour@eac.gov

cc

Subject ANSI TGDC appointment

Dear Julie and Gavin:

I started today downtown and retrieved the appointment and resignation documents. They were refaxed to Gavin at his request just a few moments ago. My records show that Juliet and I telephoned and e-mailed about this in March before her vacation, during which I agreed to get the resignation/appointment letters, and perform a "basic" ethics vetting. I faxed the letters on March 29, and the vetting was completed on April 5. I communicated successful passage of the vetting and Semerjian's assent to the appointment during phone conversations with Juliet, Carol and Gavin later that week, and early the week of April 11. I also spoke with Carol about the Turner-Bouie matter, and she related the EAC would not seek to replace her at this time.

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Gavin mentioned wanting to see a resume on Karmol in his voice mail to me this morning. Consistent with our agreement that EAC recommends and reviews the organization-specific members and NIST recommends and reviews the at-large members, NIST neither requested nor reviewed any such documents on Karmol. The basic ethics vetting only picks up ethical difficulties from our database and personnel review.

Let me know if you have any questions. I am going back out to the hearing now, so call my cell if you have a priority question. Otherwise, I'll be in the office tomorrow.

Finest Regards,
Craig

018960



"David Karmol"
<DKarmol@ansi.org>
04/26/2005 11:46 AM

To ggilmour@eac.gov
cc "Diane Zielinski" <dzielins@ansi.org>, "Anne Caldas"
<Acaldas@ansi.org>, "Allan Eustis" <allan.eustis@nist.gov>
bcc
Subject RE: TGDC Appointment

Dear Mr. Gilmour:

Attached is my bio. Beyond what is listed in the bio, I have been a candidate for public office in five elections, three of which I won. I was an elected member of the Ohio General Assembly for two terms, and was a candidate in Virginia for Commonwealths Attorney for Fairfax County in 1995.

As this request for my appointment was submitted almost a month ago, it is indeed unfortunate that this request for my resume was not made to me at that time. I was told by Mr. Burkhart at NIST that no NIST approval was required, so it may be a good idea for you to speak to him, to determine what the requirements are. I recognize the position is relatively new, but I would appreciate this request being expedited at this time.

As I do not seem to have Mr. Burkhart's e-mail, I am copying Mr. Eustis, who I trust will share this note with Craig.

If there is anything else that is needed, please let me know, with a copy to my assistant, Diane Zielinski, who is copied on this e-mail.

David L. Karmol
Vice President, Public Policy and Government Affairs
dkarmol@ansi.org
202-331-3610

From: ggilmour@eac.gov [mailto:ggilmour@eac.gov]
Sent: Monday, April 25, 2005 9:06 AM
To: dkarmol@ansi.org
Subject: TGDC Appointment

Mr. Karmol,

The EAC has recently received ANSI's request for you to serve as its representative on the EAC's Technical Guidelines Development Committee (TGDC). As you may know, appointment as a member of the TGDC requires approval from both NIST and the EAC. In order to move forward with this process, the EAC is requesting that you send a copy of your resume for review. This resume will be used to provide information to our Commissioners, so that they may make an informed decision on your appointment. Please e-mail a copy of your resume to me.

Please let me know if you have any questions.

Sincerely,

018962

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005



(202) 566-3100 Karmol Bio1.doc

018963

Attachment found at

Tally Vote

Information dated

April 27, 2005



"Allan Eustis"
<allan.eustis@nist.gov>
04/26/2005 12:04 PM

To "Craig S Burkhardt" <CSBurkhardt@DOC.GOV>
cc "David Karmol" <DKarmol@ansi.org>, ggilmour@eac.gov
bcc
Subject Fwd: RE: TGDC Appointment

Craig-

Per Mr. Karmol's request I am forwarding this e-mail.

regards

X-Sieve: CMU Sieve 2.2
From: David Karmol <DKarmol@ansi.org>
To:
Cc: Diane Zielinski <dzielins@ansi.org>, Anne Caldas <Acaldas@ansi.org>,
Allan Eustis <allan.eustis@nist.gov>
Subject: RE: TGDC Appointment
Date: Tue, 26 Apr 2005 11:46:23 -0400
X-Mailer: Internet Mail Service (5.5.2653.19)
X-MailScanner:
X-MailScanner-From: dkarmol@ansi.org

Dear Mr. Gilmour:

Attached is my bio. Beyond what is listed in the bio, I have been a candidate for public office in five elections, three of which I won. I was an elected member of the Ohio General Assembly for two terms, and was a candidate in Virginia for Commonwealths Attorney for Fairfax County in 1995.

As this request for my appointment was submitted almost a month ago, it is indeed unfortunate that this request for my resume was not made to me at that time. I was told by Mr. Burkhardt at NIST that no NIST approval was required, so it may be a good idea for you to speak to him, to determine what the requirements are. I recognize the position is relatively new, but I would appreciate this request being expedited at this time.

As I do not seem to have Mr. Burkhardt's e-mail, I am copying Mr. Eustis, who I trust will share this note with Craig.

018965

f there is anything else that is needed, please let me know, with a copy to my assistant, Diane Zielinski, who is copied on this e-mail.

David L. Karmol

Vice President, Public Policy and Government Affairs

dkarmol@ansi.org

202-331-3610

From: ggilmour@eac.gov [<mailto:ggilmour@eac.gov>]
Sent: Monday, April 25, 2005 9:06 AM
To: dkarmol@ansi.org
Subject: TGDC Appointment

Mr. Karmol,

The EAC has recently received ANST's request for you to serve as its representative on the EAC's Technical Guidelines Development Committee (TGDC). As you may know, appointment as a member of the TGDC requires approval from both NIST and the EAC. In order to move forward with this process, the EAC is requesting that you send a copy of your resume for review. This resume will be used to provide information to our Commissioners, so that they may make an informed decision on your appointment. Please e-mail a copy of your resume to me.

Please let me know if you have any questions.

Sincerely,

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005
(202) 566-3100

The contents of this e-mail are confidential and pre-decisional

018966

Allan C. Eustis
NIST Voting Systems Standards
Technology Building 225 Room B257
100 Bureau Drive, Stop 8901



Gaithersburg , Md. 20899-8901 Kamol Bio1.doc

018987

Attachment found at

Tally Vote

Information dated

April 27, 2005

Gavin S. Gilmour/EAC/GOV
04/25/2005 09:06 AM

To dkarmol@ansi.org
cc
bcc Juliet E. Thompson/EAC/GOV@EAC
Subject TGDC Appointment

Mr. Karmol,

The EAC has recently received ANSI's request for you to serve as its representative on the EAC's Technical Guidelines Development Committee (TGDC). As you may know, appointment as a member of the TGDC requires approval from both NIST and the EAC. In order to move forward with this process, the EAC is requesting that you send a copy of your resume for review. This resume will be used to provide information to our Commissioners, so that they may make an informed decision on your appointment. Please e-mail a copy of your resume to me.

Please let me know if you have any questions.

Sincerely,

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005
(202) 566-3100

018969

Gavin S. Gilmour/EAC/GOV
04/26/2005 11:54 AM

To Juliet E. Thompson/EAC/GOV@EAC, Carol A.
Paquette/EAC/GOV@EAC
cc
bcc
Subject Fw: TGDC Appointment

FYI

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005
(202) 566-3100

--- Forwarded by Gavin S. Gilmour/EAC/GOV on 04/26/2005 11:53 AM ----



"David Karmol"
<DKarmol@ansi.org>
04/26/2005 11:46 AM

To ggilmour@eac.gov
cc "Diane Zielinski" <dzielins@ansi.org>, "Anne Caldas"
<Acaldas@ansi.org>, "Allan Eustis" <allan.eustis@nist.gov>
Subject RE: TGDC Appointment

Dear Mr. Gilmour:

Attached is my bio. Beyond what is listed in the bio, I have been a candidate for public office in five elections, three of which I won. I was an elected member of the Ohio General Assembly for two terms, and was a candidate in Virginia for Commonwealths Attorney for Fairfax County in 1995.

As this request for my appointment was submitted almost a month ago, it is indeed unfortunate that this request for my resume was not made to me at that time. I was told by Mr. Burkhart at NIST that no NIST approval was required, so it may be a good idea for you to speak to him, to determine what the requirements are. I recognize the position is relatively new, but I would appreciate this request being expedited at this time.

As I do not seem to have Mr. Burkhart's e-mail, I am copying Mr. Eustis, who I trust will share this note with Craig.

If there is anything else that is needed, please let me know, with a copy to my assistant, Diane Zielinski, who is copied on this e-mail.

David L. Karmol
Vice President, Public Policy and Government Affairs
dkarmol@ansi.org
202-331-3610

From: ggilmour@eac.gov [mailto:ggilmour@eac.gov]
Sent: Monday, April 25, 2005 9:06 AM
To: dkarmol@ansi.org
Subject: TGDC Appointment

018970

Mr. Karmol,

The EAC has recently received ANSI's request for you to serve as its representative on the EAC's Technical Guidelines Development Committee (TGDC). As you may know, appointment as a member of the TGDC requires approval from both NIST and the EAC. In order to move forward with this process, the EAC is requesting that you send a copy of your resume for review. This resume will be used to provide information to our Commissioners, so that they may make an informed decision on your appointment. Please e-mail a copy of your resume to me.

Please let me know if you have any questions.

Sincerely,

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005



(202) 566-3100 Karmol Bio1.doc

018971

Attachment found at

Tally Vote

Information dated

April 27, 2005

018972

Gavin S. Gilmour/EAC/GOV
04/26/2005 12:06 PM

To "David Karmol" <DKarmol@ansi.org>@GSAEXTERNAL
cc dzielins@ansi.org
bcc
Subject RE: TGDC Appointment 

Mr. Karmol,

Thank you for your prompt reply. The bio you have sent should meet our needs. A package will be put together today and presented to the Commission at the next available opportunity. You will be informed as soon as this process is completed. If you have any questions, please contact me at the number, below.

Sincerely,

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005
(202) 566-3100
"David Karmol" <DKarmol@ansi.org>



"David Karmol"
<DKarmol@ansi.org>
04/26/2005 11:46 AM

To ggilmour@eac.gov
cc "Diane Zielinski" <dzielins@ansi.org>, "Anne Caldas"
<Acaldas@ansi.org>, "Allan Eustis" <allan.eustis@nist.gov>
Subject RE: TGDC Appointment

Dear Mr. Gilmour:

Attached is my bio. Beyond what is listed in the bio, I have been a candidate for public office in five elections, three of which I won. I was an elected member of the Ohio General Assembly for two terms, and was a candidate in Virginia for Commonwealths Attorney for Fairfax County in 1995.

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As I do not seem to have Mr. Burkhart's e-mail, I am copying Mr. Eustis, who I trust will share this note with Craig.

If there is anything else that is needed, please let me know, with a copy to my assistant, Diane Zielinski, who is copied on this e-mail.

David L. Karmol
Vice President, Public Policy and Government Affairs
dkarmol@ansi.org
202-331-3610

018973

From: ggilmour@eac.gov [mailto:ggilmour@eac.gov]
Sent: Monday, April 25, 2005 9:06 AM
To: dkarmol@ansi.org
Subject: TGDC Appointment

Mr. Karmol,

The EAC has recently received ANSI's request for you to serve as its representative on the EAC's Technical Guidelines Development Committee (TGDC). As you may know, appointment as a member of the TGDC requires approval from both NIST and the EAC. In order to move forward with this process, the EAC is requesting that you send a copy of your resume for review. This resume will be used to provide information to our Commissioners, so that they may make an informed decision on your appointment. Please e-mail a copy of your resume to me.

Please let me know if you have any questions.

Sincerely,

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005



(202) 566-3100 Karmol Bio1.doc

018974

Attachment found at

Tally Vote

Information dated

April 27, 2005

Gavin S. Gilmour/EAC/GOV
04/26/2005 01:21 PM

To Juliet E. Thompson/EAC/GOV@EAC, Carol A.
Paquette/EAC/GOV@EAC

cc

bcc

Subject KARMOL APPOINTMENT TGDC

Julie,

Here is the info you request concerning the appointment of Mr Karmol. Hopefully you can perform some sort of tally vote on the road. Attached please find (1) Mr. Karmol's Bio, (2) A memo for the Tally Vote, (3) a proposed appointment letter, (4) the ANSI letters [two] and (5) a list of TGDC members I received from Adam. I have not enclosed a copy of Mr. Burkhardt's Email memorializing NIST's approval of the candidate, as I believe you already have this in your e-mail. Please review the proposed documents and let me know if you have any questions. Hope things are going well in Boston. Let me know if you need further action on this issue.

GG



Karmol Bio1.doc



ANSI ltrs.pdf



TGDC member excel.xls



LTR- Karmol Appointment- TGDC 2.doc



Memo- Karmol Appointment- TGDC (Tly vt).doc

Gavin S. Gilmour
Associate General Counsel
United States Election Assistance Commission
1225 New York Ave., NW, Ste 1100
Washington, DC 20005
(202) 566-3100

018976

Attachments found at

A₁, A₂ & A₃

Tally Vote

Information dated

April 27, 2005

018977



U.S. ELECTION ASSISTANCE COMMISSION
1225 New York Ave. NW - Suite 1100
Washington, DC 20005

April 26, 2005

Mr. David L. Karmol
American National Standards Institute
Vice President, Public Policy and Government Affairs
1819 L Street, NW - 6th Floor
Washington, DC 20036

Dear Mr. Karmol:

On behalf of my colleagues on the U.S. Election Assistance Commission (EAC), I would like to welcome you as a member of the Technical Guidelines Development Committee (TGDC), representing the American National Standards Institute. Your participation in this Committee has been approved by both the Director of the National Institute of Standards and the EAC.

The EAC looks forward to working with you as we labor to meet the requirements of the Help America Vote Act of 2002 (HAVA). As you know, HAVA tasks the TGDC with the job of assisting the Commission in the development of voluntary voting system guidelines. This is an important effort and we welcome your participation in the process.

I have enclosed a copy of the TGDC's membership list for your perusal. Please refer to our website (www.eac.gov) for additional information. If you have any questions concerning your appointment, please feel free to contact me or Vice Chair Paul DeGregorio, EAC's Designated Federal Officer to the TGDC, at (202)566-3100.

Sincerely,

Gracia M. Hillman
Chair

Enclosures

013978

RECOMMENDATION:

Review each of the attachments and approve Mr. Karmol as ANSI's representative to the TGDC per HAVA Section 221(c).

Attachments:

1. ANSI Resignation Letter.
2. ANSI Replacement Letter.
3. E-mail noting NIST's Approval.
4. Mr. Karmol's Bio.
5. Proposed Appointment Letter.



U.S. ELECTION ASSISTANCE COMMISSION
1225 New York Ave. NW - Suite 1100
Washington, DC 20005

MEMORANDUM

TO: EAC Commissioners

FROM: Paul DeGregorio, Vice Chairman *Paul DeGregorio*
U.S. Election Assistance Commission

DATE: April 27, 2005

SUBJECT: Appointment of David Karmol to the Technical Guidelines
Development Committee (TGDC), representing ANSI

As you may know, on March 29, 2005 Ms. Anne Caldas, American National Standards Institute (ANSI), resigned as a member of the TGDC. (Attach. 1). That same day, ANSI proposed a replacement representative, Mr. David Karmol. (Attach. 2). The purpose of this memorandum is to provide information to the Commissioners about Mr. Karmol, such that he may be approved as a member of the TGDC.

The Help America Vote Act of 2002 (HAVA) provides for both the composition of the TGDC and the Committee's appointment process. Specifically, HAVA Section 221(c) (42 USC §15361(c)) specifies that the Committee will have in its membership one representative from ANSI. Further, HAVA states that all members of the Board are to be appointed jointly by NIST and the EAC. (See HAVA Section 221(c)(1)).

Recently, the EAC received notice that NIST has agreed to the appointment of Mr. Karmol (Attach. 3). As such, upon the Commission's approval, Mr Karmol will become a member of the Technical Guidelines Development Committee. To this end, I have enclosed Mr. Karmol's biography for your review. (Attach. 4)

Upon approval of this recommendation, a letter of appointment signed jointly by the Director of NIST and the Chair of EAC will be sent to Mr. Karmol to formalize and finalize his appointment.

RECOMMENDATION:

Approve Mr. Karmol as ANSI's representative to the TGDC per HAVA Section 221(c).

018931



March 29, 2005

Dr. Hratch Semerjian
TGDC Chair
Acting Director
National Institute of Standards and Technology (NIST)
100 Bureau Drive, Stop 1000
Gaithersburg, MD 20899-1000

Re: ANSI Representation on the Technical Guidelines Development Committee

Dear Dr. Semerjian:

I respectfully resign as ANSI's representative on the TGDC. ANSI's President and CEO, Dr. Mark Hurwitz, will advise you of my replacement.

Thank you for the opportunity to work with you and the excellent NIST staff on this important initiative.

Sincerely,

Anne Caldas
Director, Procedures and Standards Administration
acaldas@ansi.org
(212) 642-4914

cc: Dr. Hurwitz



DR. MARK W. HURWITZ, CAE
PRESIDENT & CEO
Tel: 202.331.3606
Email: mhurwitz@ansi.org

March 29, 2005

Dr. Hrach Semerjian
TGDC Chair
Acting Director
National Institute of Standards and Technology (NIST)
100 Bureau Drive, Stop 1000
Gaithersburg, MD 20899-1000

Re: ANSI Representation on the Technical Guidelines Development Committee

Dear Dr. Semerjian:

I am requesting that ANSI's current representative on the TGDC, Anne Caldas, be replaced by David Karmol, ANSI's Vice President of Public Policy and Government Affairs. David's contact information follows:

David L. Karmol
Vice President, Public Policy and Government Affairs
1819 L Street, NW, 6th Floor
Washington, DC 20036
E-mail: dkarmol@ansi.org
Phone: 202-331-3610

If further information is required, please advise.

Thank you for your continuing leadership with respect to this important initiative.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark W. Hurwitz".

Mark W. Hurwitz, CAE

New

Reply Forward Move Tools

✖ ✖

From: CSBurkhardt@DOC.GOV
To: juliet.thompson@eac.gov
Cc: hratch.semerjian@nist.gov, matthew.heyman@nist.gov,
PGreene@doc.gov

Date: Monday, April 25, 2005 12:41PM
Subject: TGDC Replacement

History: This message has been forwarded.

Dear Juliet:

This is to reconfirm that Dr. Semerjian has agreed to the appointment of Mr. Karmol to represent ANSI on the TGDC. The Department of Commerce previously determined that there are no pending or significant matters between the Department and Mr. Karmol, and ethics personnel have determined that there is no reason why Mr. Karmol should not be considered for the position.

Sincerely,
Craig Burkhardt
Chief Counsel for Technology
U.S. Department of Commerce

018984

David Karmol
Vice President, Public Policy and Government Affairs
American National Standards Institute (ANSI)

David Karmol currently serves as Vice President for Public Policy and Government Affairs at the American National Standards Institute (ANSI). In this position he is responsible for advocacy and outreach programs designed to better educate federal, state and local government officials on the value of the voluntary consensus standardization system and its importance to advancing the competitiveness of U.S. businesses and enhancing the health and safety of the world's citizens.

Karmol joined ANSI in July 2001 with a thorough knowledge of the issues important to the standards and conformity assessment community and a track record of success working on policies, strategies and programs in close liaison with federal, state and local governments. Prior to joining ANSI, he spent ten years as general counsel and director of public affairs at the National Spa and Pool Institute (NSPI), an ANSI member and accredited standards developer. Karmol also served as press secretary and special assistant to the director of the United States Mint; general counsel for the Can Manufacturers Institute; associate counsel to the U.S. House of Representatives Judiciary Committee; member of the Ohio House of Representatives, and assistant prosecuting attorney in Franklin County, Ohio.

Mr. Karmol received his B.A. from Miami University of Ohio, and his J.D. from the Ohio State University College of Law and is admitted to practice law in Virginia, the District of Columbia and Ohio.

ANSI's mission is to enhance U.S. global competitiveness and the American quality of life by promoting, facilitating, and safeguarding the integrity of the voluntary standardization system. ANSI is the official U.S. representative to the International Accreditation Forum (IAF), the International Organization for Standardization (ISO) and, via the U.S. National Committee, the International Electrotechnical Commission (IEC). ANSI currently has offices in New York City and Washington, DC.

018935



U.S. ELECTION ASSISTANCE COMMISSION
1225 NEW YORK AVENUE, N.W., SUITE 1100
WASHINGTON, D.C. 20005

OFFICE OF THE CHAIR

May 4, 2005

Mr. David L. Karmol
American National Standards Institute
Vice President, Public Policy and Government Affairs
1819 L Street, NW, 6th Floor
Washington, DC 20036

Dear Mr. Karmol:

On behalf of the U.S. Election Assistance Commission (EAC) and the National Institute for Standards and Technology (NIST), we would like to welcome you as a member of the Technical Guidelines Development Committee (TGDC), representing the American National Standards Institute. Your appointment is effective May 3, 2005.

The EAC looks forward to working with you as we labor to meet the requirements of the Help America Vote Act of 2002 (HAVA). As you know, HAVA tasks the TGDC with the job of assisting the Commission in the development of voluntary voting system guidelines. This is an important effort and we welcome your participation in the process.

I have enclosed a copy of the TGDC's membership list and charter for your perusal. Please refer to our website (www.eac.gov) for additional information. If you have any questions concerning your appointment, please feel free to contact Gracia Hillman, Chair, or Vice Chairman Paul DeGregorio, EAC's Designated Federal Officer to the TGDC, at (202)566-3100.

Sincerely,

Gracia M. Hillman
Chair
U.S. Election Assistance Commission

Dr. Hratch Semerjian
Acting Director
National Institute of Standards and Technology

Enclosures

Attachment 4

018987

Request to Inspect or Receive Copies of SF 278 Executive Branch Personnel Public Financial Disclosure Reports or Other Covered Records

OGE Form 201 (December 2002)

I. Application		Agency Use Only Received date: _____ Filled date: _____
1. Applicant's name and address (please print):		
1a. Office telephone number: _____ ext. _____	2. Occupation:	
3. If application is for or on behalf of any other person or organization, give the other's name:	3a. Address of the other person or organization:	
4. Type of applicant: <input type="checkbox"/> news media <input type="checkbox"/> private citizen <input type="checkbox"/> public interest group <input type="checkbox"/> law firm <input type="checkbox"/> other private organization <input type="checkbox"/> government		
5. <input type="checkbox"/> Copy of the most recent (or other, specify) Public Financial Disclosure Report Form SF 278 requested for the following named individual(s):		
a.	d.	
b.	e.	
c.	f.	
Certain other types of records ("covered records") can also be requested using this form (See Part III below); if you are requesting another covered record, check this box <input type="checkbox"/> and specify which type of record(s): _____		
6. Indicate how you wish to receive this request: <input type="checkbox"/> Pick up at OGE <input type="checkbox"/> By mail (at the address listed above)		
7. Applicant's signature: _____		Date: _____

II. Notice of Action

- Copies of the report(s) or other covered record(s) you requested are enclosed. See the **Important Notice** below.
- Picked up by (signature): _____ Date: _____
- Your request does not comply with the requirements of the statute. Please complete Part I of this form and return so we may comply with your request.
- Fees. If applicable, amount: _____ (when fees are required, make out a check payable to the U.S. Treasury and send it to the executive branch agency processing this request form).

A. Important Notice

The law and implementing OGE regulations require that a report or other covered record not be available to any person except upon written application by such person stating his or her name, occupation and address, and that the person be aware of the prohibitions on improper use, set forth below.

Section 105(c) of the Ethics in Government Act of 1978, as amended and 5 C.F.R. § 2634.603(f) of the implementing OGE regulations provide that it is unlawful for any person to obtain or use a report:

- (1) for any unlawful purpose;
- (2) for any commercial purpose, other than by news and communications media for dissemination to the general public;
- (3) for determining or establishing the credit rating of any individual; or
- (4) for use, directly or indirectly, in the solicitation of money for any political, charitable, or other purpose.

The Attorney General may bring a civil action against any person who obtains or uses a report for any such prohibited purpose as set forth above. The court may assess against such a person a penalty in any amount not to exceed \$11,000. Such remedy shall be in addition to any other remedy available under statutory or common law.

(form continued on reverse side)

B. Privacy Act Statement

Section 105 of the Ethics in Government Act of 1978, as amended (5 U.S.C. App.), and 5 C.F.R. § 2634.603 authorize the solicitation of the information requested in this form. The primary use of the information on this form is to permit officials of the recipient agency to consider and process your request for inspection or receipt of a copy(ies) of the SF 278 Executive Branch Personnel Public Financial Disclosure Report form(s) or other covered record(s) to which you seek access. Failure to furnish the information will result in this agency's inability to allow access to, or to provide copies of, the financial disclosure report form(s) or other record(s) requested. Otherwise, furnishing the requested information is voluntary. The information on this form itself may be publicly disclosed pursuant to proper request under section 105(b) of the Ethics Act or as otherwise authorized by law.

Additional disclosures of the information on this form may be made:

- (1) to a Federal, State or local law enforcement agency if the disclosing agency becomes aware of a violation or potential violation of law or regulation;
- (2) to a court or party in a court or Federal administrative proceeding if the Government is a party or in order to comply with a judge - issued subpoena;
- (3) to a source when necessary to obtain information relevant to a conflict of interest investigation or decision;
- (4) to the National Archives and Records Administration or the General Services Administration in records management inspections;
- (5) to the Office of Management and Budget during legislative coordination on private relief legislation; and
- (6) in response to a request for discovery or for the appearance of a witness in a pending judicial or administrative proceeding, if the information is relevant to the subject matter;
- (7) to reviewing officials in a new office, department or agency when an employee transfers from one covered position to another;
- (8) to a Member of Congress or a congressional office in response to an inquiry made on behalf of an individual who is the subject of the record; and
- (9) to contractors and other non-Government employees working for the Federal Government to accomplish a function related to an OGE Governmentwide system of records.

See also the OGE/GOVT- 1 executive branchwide Privacy Act system of records.

C. Public Burden Information

Public burden reporting for this collection of information is estimated to take approximately ten minutes per response, including time for reviewing instructions, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Deputy Director for Administration and Information Management, U.S. Office of Government Ethics, Suite 500, 1201 New York Avenue, NW., Washington DC 20005-3917. Do not file this form with this official; rather, file it with the appropriate office of the executive branch department or agency from which you are seeking access to a financial disclosure report or other covered records.

Pursuant to the Paperwork Reduction Act, as amended, an agency may not conduct or sponsor, and no person is required to respond to, a collection of information unless it displays a currently valid OMB control number (that number, 3209-0002, is displayed here and in the lower right-hand corner of the front page of this OGE Form 201).

III. Other Covered Records

In addition to requests for access to public SF 278 reports, this form can also be used to request access to certain other agency records which are covered under the access procedures of section 105 of the Ethics Act and the implementing OGE regulations ("covered records"). Such other covered records are: (1) certificates of divestiture; (2) Ethics Act qualified blind trust and qualified diversified trust instruments (other than those provisions which relate to the testamentary disposition of the trust assets), the list of assets transferred to such trusts (& of assets sold in the case of a qualified blind trust), as well as, in the case of trust dissolution, the report thereon and the list of trust assets at that time, and the certificates of independence and compliance with respect to qualified trusts; (3) 18 U.S.C. § 208(b)(1) & (b)(3) waivers granted by the recipient agency (after deletion of any material withholdable pursuant to the Freedom of Information Act, 5 U.S.C. § 552 (see 18 U.S.C. § 208(d)(1))); (4) other OGE Form 201s; (5) cover letters for approved gifts reporting waiver requests; and (6) cover letters for approved public reporting waiver requests for certain less than 130-day special Government employees. If you seek access to any such additional record(s), check the second box in Part I.5 on the front page and specify the record(s) sought.

Voluntary Voting System Guidelines

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Voluntary Voting System Guidelines Overview

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Voluntary Voting System Guidelines Overview

The United States Congress passed the Help America Vote Act of 2002 (HAVA) to modernize the administration of federal elections, marking the first time in our nation's history that the federal government has funded an election reform effort. HAVA provides federal funding to help the States meet the law's uniform and non-discretionary administrative requirements, which include the following new programs and procedures: 1) provisional voting, 2) voting information, 3) statewide voter registration lists and identification requirements for first-time registrants, 4) administrative complaint procedures, and 5) updated and upgraded voting equipment.

HAVA also established the U.S. Election Assistance Commission (EAC) to administer the federal funding and to provide guidance to the States in their efforts to comply with the HAVA administrative requirements. Section 202 directs the EAC to adopt voluntary voting system guidelines, and to provide for the testing, certification, decertification, and recertification of voting system hardware and software. The purpose of the guidelines is to provide a set of specifications and requirements against which voting systems can be tested to determine if they provide all the basic functionality, accessibility, and security capabilities required of voting systems.

This document, the *Voluntary Voting System Guidelines* (referred to herein as the *Guidelines* or *VVSG*), is the third iteration of national level voting system standards that has been developed. The Federal Election Commission published the *Performance and Test Standards for Punchcard, Marksense and Direct Recording Electronic Voting Systems* in 1990. This was followed by the *Voting Systems Standards* in 2002.

As required by HAVA, the EAC formed the Technical Guidelines Development Committee (TGDC) to develop an initial set of recommendations for the *Guidelines*. This committee of 15 experts began their work in July 2004 and submitted their recommendations to the EAC in the 9-month timeline prescribed by HAVA. The TGDC was provided with technical support by the National Institute for Standards and Technology (NIST), who was given nearly \$3 million dollars by the EAC to complete this work. These latest guidelines update and augment the 2002 *Voting Systems Standards* to address increasingly complex voting system technology. Specifically, the 2005 *Guidelines* address the critical topics of accessibility, usability, and security.

These guidelines are voluntary. States may adopt them in whole, in part, or not at all. States may also choose to enact stricter performance requirements for certifying their voting systems.

Effective Date

The 2005 *VVSG* shall become effective 24 months after their final adoption by the EAC. At that time, every component of every system submitted for national certification testing shall be tested for conformance with the *VVSG*. Adoption of these guidelines is voluntary, so during this 24-month period, States may adopt them in whole or in part at any time, and thereby require their systems to meet these guidelines. However, the effective date provision does not apply to the HAVA Section 301(a) mandatory requirements, which all States must comply with by January 1, 2006.

Summary of Changes

Volume I of the *Guidelines*, entitled *Voting System Performance Guidelines*, includes new requirements for usability, accessibility, voting system software distribution, system setup validation, and the use of wireless communications. This volume also includes a set of optional requirements for a Voter Verifiable Paper Audit Trail (VVPAT) component for Direct-Recording Electronic (DRE) voting systems. In addition, this volume includes an updated glossary and a conformance clause.

Volume II of the *Guidelines*, entitled *National Certification Testing Guidelines*, has been revised to reflect the new EAC process for national certification of voting systems. This process will go into effect in 2005 and will replace the voting system qualification process that has been conducted by the National Association of State Election Directors (NASED) since 1994. Volume II also includes an updated appendix on procedures for testing system error rates. Terminology in both volumes has been revised to reflect new terminology introduced by HAVA.

Volume I – *Voting System Performance Guidelines* Summary

Volume I, the *Voting System Performance Guidelines*, describes the requirements for the electronic components of voting systems. It is intended for use by the broadest audience, including voting system developers, manufacturers and suppliers; voting system testing labs; state organizations that certify systems prior to procurement; state and local election officials who procure and deploy voting systems; and public interest organizations that have an interest in voting systems and voting system standards. It contains the following sections:

Section 1 describes the purpose and scope of the guidelines.

Section 2 describes the basic functional capabilities required of voting systems.

Section 3 describes standards to make voting systems more usable and accessible to as many eligible citizens as possible, whatever their physical abilities, language skills, or experience with technology.

Sections 4 through 7 describe specific performance standards for election system hardware, software, telecommunications, and security.

Sections 8 and 9 describe requirements for vendor quality assurance and configuration management practices and the documentation about these practices required to be submitted for the EAC certification process.

Appendix A contains a glossary of terms.

Appendix B provides a list of related standards documents incorporated into the *Guidelines* by reference, as well as documents used in the preparation of the *Guidelines*, and legislation that is referenced.

Appendix C presents an informational discussion of independent verification systems as a potential concept for future voting system security design.

Appendix D contains technical guidelines on color, contrast and text size adjustment for individuals with low vision or color blindness.

Volume II – National Certification Testing Guidelines Summary

Volume II, the *National Certification Testing Guidelines*, is a complementary document to Volume I. Volume II provides an overview and specific detail of the national certification testing process, which is performed by independent voting system test labs accredited by the EAC. It is intended principally for use by vendors, test labs, and election officials who certify, procure, and accept voting systems. This volume contains the following sections:

Section 1 describes the purpose of the National Certification Testing Guidelines.

Section 2 provides a description of the Technical Data Package that vendors are required to submit with their system for certification testing.

Section 3 describes the basic functionality testing requirements.

Sections 4 through 6 define the requirements for hardware, software, and system integration testing.

Section 7 describes the required examination of vendor quality assurance and configuration management practices.

Appendix A provides the requirements for the National Certification Test Plan that is prepared by the voting system test lab and provided to the EAC for review.

Appendix B describes the scope and content of the National Certification Test Report which is prepared by the test lab and delivered to the EAC along with a recommendation for certification.

Appendix C describes the guiding principles used to design the voting system certification testing process. It also contains a section on testing system error rates.

- 1 • State and local election officials who are evaluating voting systems for potential use
- 2 in their jurisdictions
- 3 • Voting system designers and manufacturers who need to ensure that their products
- 4 fulfill all these requirements so they can be certified

5 **1.3 Evolution of Voting System Standards**

6 **1.3.1 Federal Election Commission**

7 The first voting system standards were issued in January 1990, by the Federal Election
8 Commission (FEC). This document included performance standards and testing procedures
9 for Punchcard, Marksense, and Direct Recording Electronic (DRE) voting systems. These
10 standards did not cover paper ballot and mechanical lever systems because paper ballots are
11 sufficiently self-explanatory not to require technical standards and mechanical lever systems
12 are no longer manufactured or sold in the United States. The FEC also did not incorporate
13 requirements for mainframe computer hardware because it was reasonable to assume that
14 sufficient engineering and performance criteria already governed the operation of mainframe
15 computers. However, vote tally software installed on mainframes was covered.

16 A national testing effort was initiated by NASED in 1994. As the system qualification
17 process matured and qualified systems were used in the field, the NASED Voting Systems
18 Board, in consultation with the testing labs, identified certain testing issues that needed to be
19 resolved. Moreover, rapid advancements in information and personal computer technologies
20 introduced new voting system development and implementation scenarios not contemplated
21 by the 1990 Standards.

22 In 1997, NASED briefed the FEC on the importance of keeping the Standards up-to-date.
23 Following a Requirements Analysis completed in 1999, the FEC initiated an effort to revise
24 the 1990 Standards to reflect the evolving needs of the elections community. This resulted in
25 the 2002 Voting System Standards.

26 Voters and election officials who use voting systems represent a broad spectrum of the
27 population, and include individuals with disabilities who may have difficulty using traditional
28 voting systems. In developing accessibility provisions for the 2002 Voting System
29 Standards, the FEC requested assistance from the Access Board, the federal agency in the
30 forefront of promulgating accessibility provisions. The Access Board submitted technical
31 standards to meet the diverse needs of voters with a broad range of disabilities. The FEC
32 adopted the entirety of the Access Board's recommendations and incorporated them into the
33 2002 Voting Systems Standards.

1 **1.3.2 Election Assistance Commission**

2 In 2002, Congress passed the Help America Vote Act, which established the U.S. Election
3 Assistance Commission (EAC). EAC was mandated to develop and adopt new voluntary
4 voting system guidelines and to provide for the testing, certification, and decertification of
5 voting systems. HAVA also established the Technical Guidelines Development Committee
6 (TGDC) with the duty of assisting the EAC in the development of the new guidelines. The
7 Director of NIST chairs the TGDC, and NIST was tasked to provide technical support to their
8 work. The TGDC delivered their initial set of recommendations to the EAC in May, 2005.

9 The TGDC built on the foundation of the 2002 Voting Systems Standards and the
10 accessibility provisions of HAVA to expand requirements for voting system usability and
11 accessibility. HAVA mandates that voting systems shall be accessible for individuals with
12 disabilities in a manner that provides the same opportunity for access and participation
13 (including privacy and independence) as for other voters. To facilitate the ability of
14 jurisdictions to meet these requirements, HAVA allows for the use of at least one direct
15 recording electronic or other voting system equipped for individuals with disabilities at each
16 polling place. Implementing this provision, however, will not entirely eliminate the necessity
17 of accommodating the needs of some disabled voters by human assistance, given the
18 limitations of current technology.

19 The 2005 VVSG is the culmination of sixteen months of effort by the TGDC, NIST and the
20 EAC. There is still much to be done to further develop the technical guidelines for voting
21 system performance, accessibility and usability features, and security. Further work is also
22 needed for the specification of comprehensive standard test suites for certification testing, to
23 include testing for usability and accessibility features and expanded security testing.

24 **1.4 Overview of National, State and Local Voting System Testing**

25 **1.4.1 The National Certification Program for Voting Systems**

26 The purpose of the national certification program is to validate and document, through an
27 independent testing process, that voting systems meet the requirements set forth in VVSG
28 Volume 1 - Voting System Performance Guidelines, and perform according to the vendor's
29 specifications for the system. Volume 1 specifies the minimum functional requirements,
30 performance characteristics, documentation requirements, and test evaluation criteria that
31 voting systems must meet in order to receive national certification. More than forty [need to
32 get final version of this number] States require that a voting system must have national
33 certification before it can be considered for purchase within that State.

34

1 National certification testing can only be performed by testing labs that have been accredited
2 for demonstrated technical competence to test voting systems using these Guidelines.
3 Volume 2 of the VVSG - National Certification Testing Guidelines - provides guidance on
4 the testing process and describes the associated documentation requirements. These tests
5 encompass the examination of software; the inspection and evaluation of system
6 documentation; tests of hardware under conditions simulating the intended storage, operation,
7 transportation, and maintenance environments; operational tests to validate system
8 performance and function under normal and abnormal conditions; and examination of the
9 vendor's system development, testing, quality assurance, and configuration management
10 practices. Certification tests address individual system components or elements, as well as the
11 integrated system as a whole.

12 Since 1994, testing of voting systems has been performed by Independent Test Authorities
13 (ITAs) certified by the National Association of State Election Directors (NASED). Upon the
14 successful completion of testing, the ITA issued a Qualification Test Report to the vendor
15 and NASED. The Technical Committee of the NASED Voting Systems Board would review
16 the test report and, if satisfactory, issue a Qualification Number. The Qualification Number
17 remains valid for as long as the voting system remains unchanged.

18 HAVA mandates that the certification testing process be transferred from NASED to EAC.
19 National certification testing complements and evaluates the vendor's developmental testing
20 and beta testing. The test lab is expected to evaluate the completeness of the vendor's
21 developmental test program, including the sufficiency of vendor tests conducted to
22 demonstrate compliance with the Guidelines as well as the system's performance
23 specifications. The test lab undertakes sample testing of the vendor's test modules and also
24 designs independent system-level tests to supplement and check those designed by the
25 vendor. Although some of the certification tests are based on those prescribed in the Military
26 Standards, in most cases the test conditions are less stringent, reflecting commercial, rather
27 than military, practice.

28 Upon review of test reports and a determination that satisfactory results were achieved that
29 address the full scope of testing, EAC will issue a Certification Number that indicates the
30 system has successfully completed testing by an accredited test lab for compliance with the
31 Guidelines. The Certification Number applies to the system as a whole and does not apply to
32 individual system components or untested configurations.

33 After a system has completed initial certification testing, further examination of the system is
34 required if modifications are made to hardware, software, or telecommunications, including
35 the installation of software on different hardware. Vendors request review of modifications
36 by the test lab based on the nature and scope of changes made. The test lab will assess
37 whether the modified system should be resubmitted for certification testing and the extent of
38 testing to be conducted and will provide an appropriate recommendation to the EAC and the
39 vendor.

40 Generally, a voting system remains certified under the standards against which it was tested,
41 as long as no modifications requiring recertification have been made to the system. However,
42 if a new threat to a particular voting system is discovered, it is the prerogative of EAC to

1 determine which certified voting systems are vulnerable, whether those systems need to be
2 retested, and the specific tests to be conducted. In addition, when new requirements
3 supersede the requirements under which the system was certified, it is the prerogative of EAC
4 to determine when systems that were certified under the earlier requirements will need to be
5 re-tested to meet the current guidelines.

6 **1.4.2 State Certification Testing**

7 State certification tests are performed by individual states, with or without the assistance of
8 outside consultants, to:

- 9 • Confirm that the voting system presented is the same as the one certified under the
10 Guidelines
- 11 • Test for the proper implementation of state-specific requirements
- 12 • Establish a baseline for future evaluations or tests of the system, such as acceptance
13 testing or state review after modifications have been made
- 14 • Define acceptance tests

15 State certification test scripts are not included in the Guidelines, as they must be defined by
16 the state, with its laws, election practices, and needs in mind. However, it is recommended
17 that they not duplicate the national certification tests, but instead focus on functional tests and
18 qualitative assessment to ensure that the system operates in a manner that is acceptable under
19 state law. If a voting system is modified after state certification is completed, it is
20 recommended that states reevaluate the system to determine if further certification testing is
21 warranted.

22 Certification tests performed by individual states typically rely on information contained in
23 documentation provided by the vendor for system design, installation, operations, required
24 facilities and supplies, personnel support and other aspects of the voting system. States and
25 jurisdictions may define information and documentation requirements additional to those
26 defined in the Guidelines. By design, the Guidelines do not address these additional
27 requirements. However, national certification testing will address all the capabilities of a
28 voting system stated by the vendor in the system documentation submitted with the testing
29 application to the EAC, including additional capabilities required by the States.

30 **1.4.3 Acceptance Testing**

31 Acceptance tests are performed at the state or local jurisdiction level upon system delivery by
32 the vendor to:

- 33 • Confirm that the system delivered is the specific system certified by EAC and, when
34 applicable, certified by the state

- 1 • Evaluate the degree to which delivered units conform to both the system
 - 2 characteristics specified in the procurement documentation, and those demonstrated in
 - 3 the national and state certification tests
 - 4 • Establish a baseline for any future required audits of the system
- 5 Some of the operational tests conducted during certification may be repeated during
- 6 acceptance testing.

7 **1.5 Definitions, References, and Types of Voting Systems**

8 **1.5.1 Definitions and References**

9 The Guidelines contain terms describing function, design, documentation, and testing
10 attributes of voting system hardware, software and telecommunications. Unless otherwise
11 specified, the intended sense of technical terms is that which is commonly used by the
12 information technology industry. In some cases terminology is specific to elections or voting
13 systems. A glossary of terms is contained in Appendix A. Non-technical terms not listed in
14 Appendix A shall be interpreted according to their standard dictionary definitions.

15 There are a number of technical standards that are incorporated in the Guidelines by
16 reference. These are referred to by title in the body of the document. The full citations for
17 these publications are provided in Appendix B. In addition, this appendix includes other
18 references that may be useful for understanding and interpretation.

19 **1.5.2 Types of Voting Systems**

20 HAVA Section 301 defines a voting system as the total combination of mechanical,
21 electromechanical, or electronic equipment (including the software, firmware, and
22 documentation required to program, control, and support the equipment), that is used to
23 define ballots; to cast and count votes; to report or display election results; and to maintain
24 and produce any audit trail information. In addition, a voting system includes the practices
25 and associated documentation used to identify system components and versions of such
26 components; to test the system during its development and maintenance; to maintain records
27 of system errors and defects; to determine specific system changes made after initial
28 certification; and to make available any materials to the voter (such as notices, instructions,
29 forms, or paper ballots).

30 Traditionally, a voting system has been defined by the mechanism the system uses to cast
31 votes and further categorized by the location where the system tabulates ballots. In addition to
32 defining a common set of requirements that apply to all voting systems, the VVSG states

1 requirements specific to a particular type of voting system, where appropriate. However, the
2 Guidelines recognize that as the industry develops new solutions and the technology
3 continues to evolve, the distinctions between voting system types may become blurred. The
4 fact that the VVSG refers to specific system types is not intended to stifle innovations that
5 may be based on a more fluid understanding of system types. However, appropriate
6 procedures must be in place to ensure new developments provide the necessary integrity and
7 can be properly evaluated in the certification process.

8 Consequently, vendors that submit a system that integrates components from more than one
9 traditional system type or a system that includes components or technology not addressed in
10 the Guidelines shall submit the results of all beta tests of the new system when applying for
11 national certification. Vendors shall also submit a proposed test plan to the EAC for use in
12 national certification testing. The Guidelines permit vendors to produce or utilize
13 interoperable components of a voting system that are tested within the full voting system
14 configuration.

15 The listing below summarizes the functional requirements that HAVA Section 301 mandates
16 to assist voters. While these requirements may be implemented in a different manner for
17 different types of voting systems, all types of voting systems must provide these capabilities:

- 18 • permit the voter to verify (in a private and independent manner) the vote selected by
19 the voter on the ballot before the ballot is cast and counted
- 20 • provide the voter with the opportunity (in a private and independent manner) to
21 change the ballot or correct any error before the ballot is cast and counted
- 22 • notify the voter if he or she has selected more than one candidate for a single office,
23 inform the voter of the effect of casting multiple votes for a single office, and provide
24 the voter an opportunity to correct the ballot before it is cast and counted
- 25 • be accessible for individuals with disabilities in a manner that provides the same
26 opportunity for access and participation (including privacy and independence) as for
27 other voters
- 28 • provide alternative language accessibility pursuant to Section 203 of the Voting
29 Rights Act

30 **1.5.2.1 Paper-Based Voting System**

31 A Paper-Based Voting System records votes, counts votes, and produces a tabulation of the
32 vote count from votes cast on paper cards or sheets. A marksense (also known as optical
33 scan) voting system allows a voter to record votes by making marks directly on the ballot,
34 usually in voting response locations. Additionally, a paper-based system may allow for the
35 voter's selections to be indicated by marks made on a paper ballot by an electronic input
36 device, as long as such an input device does not independently record, store, or tabulate the
37 voter selections.

1 **1.5.2.2 Direct Recording Electronic Voting System**

2 A Direct Recording Electronic (DRE) Voting System records votes by means of a ballot
3 display provided with mechanical or electro-optical components that can be activated by the
4 voter; that processes data by means of a computer program; and that records voting data and
5 ballot images in memory components. It produces a tabulation of the voting data stored in a
6 removable memory component and as printed copy. The system may also provide a means
7 for transmitting individual ballots or vote totals to a central location for consolidating and
8 reporting results from precincts at the central location.

9 **1.5.2.3 Public Network Direct Recording Electronic Voting** 10 **System**

11 A Public Network Direct Recording Electronic (DRE) Voting System is an election system
12 that uses electronic ballots and transmits vote data from the polling place to another location
13 over a public network. Vote data may be transmitted as individual ballots as they are cast,
14 periodically as batches of ballots throughout the election day, or as one batch at the close of
15 voting. For purposes of the Guidelines, Public Network DRE Voting Systems are considered
16 a form of DRE Voting System and are subject to the standards applicable to DRE Voting
17 Systems. However, because transmitting vote data over public networks relies on equipment
18 beyond the control of the election authority, the system is subject to additional threats to
19 system integrity and availability. Therefore, additional requirements are applied to provide
20 appropriate security for data transmission.

21 The use of public networks for transmitting vote data must provide the same level of integrity
22 as other forms of voting systems, and must be accomplished in a manner that precludes three
23 risks to the election process: automated casting of fraudulent votes, automated manipulation
24 of vote counts, and disruption of the voting process such that the system is unavailable to
25 voters during the time period authorized for system use.

26 **1.5.2.4 Precinct Count Voting System**

27 A Precinct Count Voting System is a voting system that tabulates ballots at the polling place.
28 These systems typically tabulate ballots as they are cast and print the results after the close of
29 polling. For DREs, and for some paper-based systems, these systems provide electronic
30 storage of the vote count and may transmit results to a central location over public
31 telecommunication networks.

1 **1.5.2.5 Central Count Voting System**

2 A Central Count Voting System is a voting system that tabulates ballots from multiple
3 precincts at a central location. Voted ballots are typically placed into secure storage at the
4 polling place. Stored ballots are transported or transmitted to a central counting place. The
5 systems produce a printed report of the vote count, and may produce a report stored on
6 electronic media.
7

8 **1.6 Conformance Clause**

9 **1.6.1 Scope and Applicability**

10 The Voluntary Voting System Guidelines define requirements for conformance of voting
11 systems that voting system vendors shall meet. The Guidelines also provide the framework,
12 procedures, and requirements that testing labs responsible for the testing of voting
13 certification systems shall follow. The requirements and procedures in the Guidelines may
14 also be used by States to certify voting systems. To ensure that correct voting system software
15 has been distributed without modification, the Guidelines include requirements for certified
16 voting system software to be deposited in a national software repository. This provides an
17 independent means for election officials to verify the software they purchase.

18 The Guidelines define the minimum requirements for voting systems and the process of
19 testing voting systems. The guidelines are intended for use by:

- 20 • Designers and manufacturers of voting systems
- 21 • Test labs performing the analysis and testing of voting systems in support of the EAC
22 national certification process
- 23 • National software repositories, either maintained by the National Institute of
24 Standards and Technology (NIST) or by another EAC designated repository
- 25 • Election officials, including ballot designers and officials responsible for the
26 installation, operation, and maintenance of voting machines
- 27 • Test labs and consultants performing the state certification of voting systems

28

1 Minimum requirements specified in these guidelines include:

- 2 • Functional capabilities
- 3 • Performance characteristics, including security
- 4 • Documentation
- 5 • Test evaluation criteria

6 **1.6.2 Conformance Framework**

7 This section provides the framework in which conformance is defined. It identifies the
8 entities to which these guidelines apply, the relationships among the various entities, the
9 structure of the requirements, and the terminology used to indicate conformance.

10 **1.6.2.1 Applicable Entities**

11 The requirements, prohibitions, options, and guidance specified in these guidelines apply to
12 voting systems, voting system vendors, test labs, and software repositories.

13 In general, requirements for voting systems in these guidelines apply to all types of voting
14 systems, unless prefaced with explanatory narrative applicability identifying limited to a
15 specific typed system. Other terms in these guidelines shall be construed as synonymous with
16 "voting systems." They are: "systems", "the system", "the voting system", and "each voting
17 system".

18 The term "voting system vendor" imposes system documentation or testing requirements for
19 the manufacturer or vendor. Other terms in these guidelines shall be construed as
20 synonymous with "voting system vendor." They are: "vendors", "the vendor", "manufacturer
21 or vendor", "voting system designers", and "implementer".

22 The terms used to designate requirements and procedural guidelines for national certification
23 testing laboratories are indicated by referring to "testing authorities", "test labs", and
24 "accredited test labs". The term "repository" will be used to designate requirements levied on
25 the National Software Reference Library repository maintained at NIST or any other
26 designated repository.

27 **1.6.2.2 Relationships Among Entities**

28 It is the voting system vendor that needs to implement these requirements and provide the
29 necessary documentation for the system. In order to claim conformance to the Guidelines,
30 the voting system vendor shall satisfy the specified requirements, including implementation
31 of functionality, prescribed software coding and assurance practices, and preparation of the

1 Technical Data Package. The voting system vendor shall successfully complete the
2 prescribed test campaign with an EAC accredited voting system test lab.

3 The accredited test lab shall satisfy the requirements for conducting certification testing. The
4 test lab may use an operational environment emulating that used by election officials as part
5 of their testing to ensure that the voting system can be configured and operated in a secure
6 and reliable manner according to the vendor's documentation and as specified by the
7 Guidelines. The test lab shall coordinate and deliver the requisite documentation and final
8 test report to the EAC for review. Upon issuance of a certification number by the EAC, the
9 test lab shall deposit a copy of the certified voting system software with the National
10 Software Reference Library.

11 The EAC shall review the test results and associated documentation and make a
12 determination that all requirements have been appropriately tested and the test results are
13 acceptable. The EAC will issue a national certification number that indicates conformance of
14 the specified system with these Guidelines.

15 The National Software Reference Library (NSRL) shall create a digital signature of the
16 voting system software provided by the test lab. This information will be posted to a website
17 so election officials can compare the digital signature of the software provided to them by the
18 voting system vendor with this certified reference. The NSRL shall maintain this reference
19 information until notified by the EAC that it can be archived.

20 **1.6.3 Structure of Requirements**

21 Each voting system requirement in Volume I is identified according to a hierarchical scheme
22 in which higher-level requirements (such as "provide accessibility for visually impaired
23 voters") are supported by lower-level requirements (e.g., "provide an audio-tactile
24 interface"). Thus, requirements are nested. When the nesting hierarchy has reached four
25 levels (i.e. 1.1.1.1), further nested requirements are designated with lowercase letters, then
26 roman numerals, then numbers. Therefore, all requirements are traceable by distinct
27 reference insignia.

28 Some requirements are directly testable and some are not. The latter tend to be higher-level
29 and are included because 1) they are testable indirectly insofar as their lower-level
30 requirements are testable, and 2) they often provide the structure and rationale for the lower-
31 level requirements. Satisfying the lower-level requirements will result in satisfying the
32 higher-level requirement.

33 **1.6.3.1 Conformance Language**

34 The following keywords are used to convey conformance requirements:

- 1 • **Shall** – indicates a mandatory requirement in order to conform. Synonymous with “is
2 required to.”
- 3 • **Is prohibited** – indicates a mandatory requirement that indicates something that is not
4 permitted, in order to conform. Synonymous with “shall not.”
- 5 • **Should, is encouraged** - indicates an optional recommended action, one that is
6 particularly suitable, without mentioning or excluding others. Synonymous with “is
7 permitted and recommended.”
- 8 • **May** - indicates an optional, permissible action. Synonymous with “is permitted.”

9 This text is directly applicable to achieving conformance to this document. Informative parts
10 of this document include examples, extended explanations, and other matter that contain
11 information necessary for proper understanding of the Guidelines and conformance to it.

12 **1.6.3.2 Categorizing Requirements**

13 The Guidelines define a common set of requirements that apply to all types of electronic
14 voting systems for the purpose of acquiring national certification. For example, the
15 requirements implementing the alternative language accessibility mandated by HAVA 301(a)
16 (4) must be met by all voting systems that will be used in instructions subject to Section 203
17 in USC 1705 of the Voting Rights Act. Conversely, the requirements implementing the other
18 HAVA Section 301(a) mandates, except for disability accessibility must be met by all voting
19 systems.

20 In addition, the Guidelines categorize some requirements into related groups of functionality
21 to address equipment type, ballot tabulation location, and voting system component (e.g.,
22 election management system, voting station). Hence, all of the requirements contained in the
23 Guidelines do not apply to all elements of all voting systems. For example, requirements
24 categorized as applying to DRE systems are not applicable to paper-based voting. The
25 requirements implementing the disability accessibility mandated by HAVA 301(a) (3) (A) are
26 not required of all voting systems, only by those systems the vendor designates as accessible
27 voting systems.

28 Among the categories defined in the VVSG are two types of voting systems with respect to
29 mechanisms to cast votes – Paper-Based Voting Systems and Direct Recording Electronic
30 (DRE) Voting Systems. Additionally, voting systems are further categorized by the locations
31 where ballots are tabulated – Precinct Count Voting Systems, which tabulate ballots at the
32 polling place, and Central Count Voting Systems, which tabulate ballots from multiple
33 precincts at a central location. The Guidelines define specific requirements for systems that
34 fall within these four categories as well as various combinations of these categories.

1 **1.6.3.3 Extensions**

2 Extensions are additional functions, features, and/or capabilities included in a voting system
3 that are not required by the Guidelines. To accommodate the needs of states that may impose
4 additional requirements and to accommodate changes in technology, these guidelines allow
5 extensions. For example, the requirements for a voter verifiable paper audit trail feature will
6 only be applied to those systems designated by the vendor as providing this feature. The use
7 of extensions shall not contradict nor cause the nonconformance of functionality required by
8 the Guidelines.

9 **1.6.4 Implementation Statement**

10 The voting system implementation statement describes the voting system and documents the
11 VVSG Volume 1 requirements that have been implemented by the voting system. It can also
12 identify optional features and capabilities supported by the voting system, as well as any
13 extensions (i.e., additional functionality beyond what is required in the guidelines). The
14 implementation statement will include a checklist identifying all the requirements for which a
15 claim of conformance is made.

16 The implementation statement must be submitted with the vendor's application to the EAC
17 for national certification testing. It must provide a concise summary and narrative description
18 of the voting system's capabilities. It shall include identifying information about the voting
19 system, including the hardware and software components, version number and date.

1.7 Effective Date

The Voluntary Voting System Guidelines (VVSG) shall become effective for national certification testing 24 months after their final adoption by EAC. At that time, all new systems submitted for national certification shall be tested for conformance with these Guidelines. In addition, if a modification to a system certified or qualified to a previous standard is submitted for national certification after this date, every component of the modified system shall be tested using these Guidelines. All previous versions of national voting system standards will become obsolete upon this effective date.

These Guidelines are voluntary in that each of the states can decide whether to require the voting systems used in their state to have a national certification. States may decide to adopt these Guidelines in whole or in part at any time, irrespective of the effective date. In addition, States may specify additional requirements that voting systems in their jurisdiction must meet. The national certification program does not in any way pre-empt the ability of the States to have their own system certification process.

This VVSG effective date provision has no effect on the mandatory voting system requirements prescribed in Section 301(a) of the Help America Vote Act (HAVA), which States must comply with on or before January 1, 2006. The EAC issued Advisory 2005-004 to assist States in determining if a voting system is compliant with Section 301(a). This advisory is available on the EAC website at www.eac.gov.

VOLUNTARY VOTING SYSTEM GUIDELINES – VOLUME 1

Voting System Performance Guidelines

1 Introduction

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FOIA File

1 Introduction

2 1.1 Purpose and Scope of the Voluntary Voting System 3 Guidelines

4 The purpose of the *Voluntary Voting System Guidelines* (hereinafter referred to as *VVSG* or
5 the *Guidelines*) is to provide a set of specifications and requirements against which voting
6 systems can be tested to determine if they provide all the basic functionality, accessibility,
7 and security capabilities required of voting systems. The *VVSG* specifies the functional
8 requirements, performance characteristics, documentation requirements, and test evaluation
9 criteria for the national certification of voting systems. To the extent possible, these
10 requirements and specifications are described so they can be assessed by a series of defined,
11 objective tests. The *VVSG* is composed of two volumes: Volume 1, *Voting System*
12 *Performance Guidelines*, and Volume 2, *National Certification Testing Guidelines*.

13 The *VVSG* is one of several inter-related EAC promulgated guidelines and programs
14 concerned with maintaining the reliability and security of voting systems and the integrity of
15 the overall election process. National certification testing of voting systems is restricted to
16 testing labs that have been formally accredited to be technically competent to evaluate
17 systems for conformance to the *Voting System Performance Guidelines*. The National
18 Association of State Election Directors (NASED) initiated the independent testing authority
19 accreditation program for voting system test labs in 1994, applying the standards and
20 procedures in NASED Program Handbook 9201 (Revision A). With the passage of the Help
21 America Vote Act (HAVA), this responsibility transitioned to the Election Assistance
22 Commission (EAC) with support from the National Voluntary Laboratory Accreditation
23 Program (NVLAP). This program is operated by the National Institute of Standards and
24 Technology (NIST), applying the standards and procedures in NIST Handbook 150-22,
25 NVLAP Voting System Testing.

26 The *VVSG* and the test lab accreditation process are essential components of the EAC
27 National Certification Program for voting systems. This program applies the standards and
28 procedures documented in the EAC voting system certification manual. HAVA Section 231
29 charges EAC with providing for the certification, decertification and recertification of voting
30 systems. Under this program national certification is just the first step of the life cycle process
31 of maintaining the reliability and security of the voting systems used in the nation's elections.
32 To carry out this mandate, the EAC program will include monitoring of voting system
33 performance through incident reporting by election officials and others. The certification
34 program will maintain information on the quality assurance practices associated with the
35 development and manufacturing of voting systems. When a system has successfully
36 completed the certification process, the EAC program requires a copy of the certified voting

1 Introduction

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35 development and manufacturing of voting systems. When a system has successfully
36 completed the certification process, the EAC program requires a copy of the certified voting

1 system software to be provided to the National Software Reference Library operated by
2 NIST. This will enable election officials to validate that the software received by their
3 jurisdictions is the same as the certified version.

4 The VVSG notes the need for appropriate procedures to complement and supplement the
5 technical requirements for voting system performance. It is well known that deficiencies in
6 election management and administration procedures can have just as much impact on the
7 enfranchisement of voters and the outcome of elections as the functioning of the voting
8 machines. The overall integrity of the election process depends on both of these elements
9 working together. EAC and NASED have instituted a multi-year effort to develop a
10 comprehensive set of election management guidelines that will complement the technical
11 system guidelines, as well as cover other elements of the election process.

12 Except as noted below, VVSG Volume I, *Voting System Performance Guidelines*, applies to
13 all system hardware, software, telecommunications, and documentation intended for use to:

- 14 • Prepare the voting system for use in an election
- 15 • Produce the appropriate ballot formats
- 16 • Test that the voting system and ballot materials have been properly prepared and are
17 ready for use
- 18 • Record and count votes
- 19 • Consolidate and report election results
- 20 • Display results on-site or remotely
- 21 • Produce and maintain comprehensive audit trail data

22 Some voting systems use one or more commercial off-the-shelf (COTS) devices (such as card
23 readers, printers, and personal computers) or software products (such as operating systems,
24 programming language compilers, and database management systems). These devices and
25 products are exempt from certain portions of system certification testing, as long as they are
26 not modified for use in the voting system.

27 VVSG Volume 2, *National Certification Testing Guidelines*, describes the testing process
28 that is designed to provide a documented independent verification by an accredited testing
29 laboratory that a voting system has been demonstrated to conform to the Volume 1
30 requirements and therefore should receive national certification. It provides specific detail
31 about the testing process and documentation requirements required to support the national
32 certification program.

33 **1.2 Use of the Voluntary Voting System Guidelines**

34 The *Guidelines* are intended for use by multiple audiences to support their respective roles in
35 the development, testing, and acquisition of voting systems:

- 36 • The accredited testing laboratories who use this information to develop test plans and
37 procedures for the analysis and testing of systems in support of the national
38 certification testing process

Calendar Entry

Appointment

Notify me Mark Private Pencil In

Subject FOIA Telcon (EPIC)

Where **Location**

When
Starts: Fri 05/20/2005 11:00 AM
Ends: Fri 05/20/2005 12:00 PM
1 hour
 Specify a different time zone

Categorize

Description

The teleconference meeting to discuss EPIC's FOIA request to the EAC regarding the development of voting technology standards will take place at 11:00 AM, Friday, May 20th.

EPIC's conference bridge can be accessed by dialing 512-225-3050 access code 65889#

Thank you
--
Lillie Coney

Handwritten notes:

Transcripts

Minutes

EAC appointment process

Request to process

Disclosures

Remind on 7/6/06

Voting tech relay stored

FGAC

EAC way

FGAC Removalett on VUSG

019011



U.S. ELECTION ASSISTANCE COMMISSION
1225 New York Ave. NW - Suite 1100
Washington, DC 20005

June X, 2005

Ms. Lillie Coney
Associate Director
Electronic Privacy Information Center (EPIC)
1718 Connecticut Ave, NW
Washington, DC 20009

RE: FOIA Request

Dear Ms. Coney:

This letter is in response to your Freedom of Information Act (FOIA) request received by the U. S. Election Assistance Commission (EAC) on May 10, 2005. The request was clarified in a May 20, 2005 phone conversation as memorialized in a letter sent to you on that same day. Your clarified request sought certain records from "March 23, 2004 to the present," including:

1. Any and all transcripts, meeting minutes or similar documents memorializing the Technical Guidelines Development Committee (TGDC) meetings or hearings which are in the possession of the EAC and not publicly available on the NIST web site.
2. Any and all EAC documents or communications regarding the selection or appointment of members of the TGDC.
3. All Public Financial Disclosure Forms (OGE Form 278) filed by members of the TGDC.
4. The recommended Voluntary Voting Systems Guidelines (VVSG) presented to the EAC by the TGDC.

In response to item 1, the EAC does not have any records other than what is posted on the NIST website; www.vote.nist.gov. If you visit the website you will find minutes for the July, 9, 2004; January 18-19, 2005; and March 9, 2005 meetings. You can also view either transcripts or listen to webcasts from these meetings and the September 20-22, 2005 meeting. The minutes and/or transcript from the April 20-21, 2005 meeting should be published to the website shortly. The EAC contacted NIST and was told that it does not have any additional documents besides what is posted on the website.

019012

In response to item 2, we have enclosed all written records located after a reasonable search dealing with the selection or appointment of members to the TGDC. Pursuant to the FIOA disclosure exemption 6, 5 U.S.C. §552(b)(6), we have redacted personal information such as home addresses, telephone numbers and e-mail addresses; and all cell phone numbers.

In response to item 3, the only individual who has to file a public financial disclosure form is Dr. Hratch Semerjian, the Acting Director of NIST. In order to obtain a copy of his OGE form 278 you will need to complete the enclosed OGE form 201 and submit it to NIST, as it is the custodian of this record.

In response to item 4, we have enclosed a disk with a complete copy of the VVSG version 1 as it was delivered to the EAC from the TGDC.

The EAC will waive the processing fees for this specific FOIA request, per your request.

If you interpret any portion of this response as an adverse action, you may appeal it to the EAC. Your appeal must be in writing and sent to the address noted on the above letterhead. Any appeal submitted, must be postmarked no later than 60 calendar days from the date of this letter. Please include your reasons for reconsideration and attach a copy of this letter.

Sincerely,

Gavin S. Gilmour
Associate General Counsel
U.S. Election Assistance Commission

Attachments: TGDC Appointment Communications
OGE Form 201
Disk containing VVSG version 1 turned over to the EAC on May 9, 2005

019013



Paul DeGregorio/FEC/US
03/04/2004 07:46 PM

To csburkhardt@doc.gov
cc
bcc
Subject meeting ASAP

Craig,

As I may have discussed with you, the EAC would like to announce at its March 23rd first public meeting the formation of the Technical Guidelines Development Committee (TGDC) and, possibly, when their first meeting will be held. The formation of this committee will put into motion a timetable to develop and approve the voluntary standards outlined in HAVA. We would like to discuss with NIST what HAVA requires the TGDC to do--and what we can do realistically what the funds we may or may not have. We can also work on a strategy whereby we put the things we cannot do in FY04 into our (or your) FY05 budget request.

There has been some confusion in recent days over what monies NIST does or does not have available for this purpose. Today, Penelope Bonsall of my staff was told by Dr. Zevin that there was only \$350,000 to work with for FY04--and that very little progress with standards could be made with it. In addition, Dr. Zevin's presentation at NASS and NASED has confused some people because they didn't quite understand that when Susan included 7 pages of "what could be done in the next six months" in her presentation, some folks thought that is what NIST will do in 2004. I understood it to be the NIST wish list and was not sure what portion will come under the TGDC umbrella. In addition to all of this, we have been reviewing the Human Factors report developed by NIST and have some questions. We would like to release this report at our March 23 meeting. We would like for representatives of NIST to be at our public meeting to discuss the TGDC and Human Factors report.

Therefore, I would like to propose that the following folks meet ASAP (Monday or Tuesday of next week; March 8 or 9) to talk about these issues.

Paul DeGregorio, EAC
Penelope Bonsall, EAC
Craig Burkhardt, DOC
Dr. Zevin, NIST
Allan Eustis, NIST

I think it might be best if the NIST folks heard from you to set this meeting up. Can you (or your designee) call Penelope Bonsall at 202-694-1097 with a time and place (we are flexible) for a meeting on Monday or Tuesday?

The agenda could be as follows:

- 1) TGDC: expectations on who will be appointed; what is it they must/can do in FY04 and FY05. What is the TGDC timetable?
- 2) Human Factors report
- 3) Dr. Zevin's "what could be done in the next 6 months";
- 4) Funding issues for all of this. Can we get money from DOD?

I am on travel on Friday, March 5 but can be reached on my federal cell phone which is 202-360-2146

Thanks for your help and attention to this important matter.

Paul DeGregorio

019014



Allan Eustis
<allan.eustis@nist.gov>
03/16/2004 01:26 PM

To PDeGregorio@fec.gov
cc Susan Zevin <susan.zevin@nist.gov>, Craig S Burkhardt
<CSBurkhardt@DOC.GOV>
bcc

Subject Rush Holt Suggested Nominees to TGDC

Paul-

Along with the NIST voting team, I reviewed the names and biographies submitted by Congressman Holt's Office for nomination to the four "open" positions on the Technical Guidelines Development Committee. Avi Rubin, Barbara Simons and Michael Alvarez are all extremely qualified for the TGDC. In fact, during our deliberations, the NIST voting team considered each of these individuals for inclusion on our final list. However, there were important reasons for choosing the individuals we did. Rather than criticize these fine nominees, any of whom would bring expertise to the TGDC, I will list the criteria for NIST's final selection of nominees:

1. Technical Competence in Standards Development Processes,
2. Open Minded and Unbiased View points. No pre-set agendas,
3. Global view of security and usability issues related to voting systems and voting equipment
4. Unique "lifetime/career" experiences and expertise not available from other appointed TGDC members

I would also note that like Michael Alvarez, NIST nominee Ron Rivest was also a co-author of the Cal tech/MIT report. We at NIST stand by our nominees as the strongest candidates to meet our strict criteria for inclusion on the TGDC.

I hope this description of our TGDC nominee evaluation process will assist the EAC in the selection of the four "open" positions. We will shortly provide you with a "final four" list from the original list of six individuals. We have broadened our selection to include women who were on our original list.

I will send you some talking points for the March 23rd EAC meeting tomorrow morning. I am a bit swamped today having just returned from leave.

Regards

Allan C. Eustis
Project Leader- NIST Voting Systems Standards
Technology Building 225 Room B257
100 Bureau Drive, Stop 8901
Gaithersburg, Md. 20899-8901
301-975-5099

019015

allan.eustis@nist.gov
<http://vote.nist.gov>

019016



Allan Eustis
<allan.eustis@nist.gov>
03/19/2004 09:14 AM

To s.tatiner@ieee.org
cc Paul Degregorio <PDeGregorio@fec.gov>
bcc
Subject Re: IEEE Representative

Susan-

I have forwarded your e-mail on to the Election Assistance Commission. IEEE will still likely receive a formal letter requesting a nominee, but your response is quite helpful and will speed the process of spinning up the TGDC.

thanks

At 05:22 PM 3/18/2004 -0500, you wrote:

Dear Allan:

Judy Gorman referred me your email query about a formal nomination of the IEEE representative to the Technical Guidelines Development (TGD) Committee of the Election Assistance Commission (EAC).

I spoke with Donald Heirman, IEEE Standards Association President Elect and IEEE-SA Board of Governors (IEEE-SA BoG) Liaison to Standards Coordinating Committee 38 (SCC38), which is the group within IEEE working on voting standards. Don asked that I write to let you know that last year, the IEEE-SA BoG named Stephen H. Berger as its choice to represent IEEE on the TGD Committee. Stephen is a member of the IEEE-SA Standards Board and Chair of SCC 38.

I hope that this email answers your questions. I would be glad to provide further information or assistance, if needed.

Sincerely,

Susan

Susan K. Tatiner, CAE
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Technical Program Development
IEEE Standards Activities
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019017

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301-975-5099
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019018



"Allan Eustis"
<allan.eustis@nist.gov>
04/22/2004 03:41 PM

To "Paul Degregorio" <pdegregorio@eac.gov>
cc
bcc
Subject

Final NIST nominees are:

patrick Gannon
daniel Schutzer
Whitney Quesenberg
Ronald Rivest

bios attached

Allan C. Eustis
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<http://vote.nist.gov> DanielSchutzerBIO.doc Gannonresumee.doc nomanresumee.doc quesenberg bio and abstract.doc

019019

Attachments found at

NIST letter to the

EAC dated

April 27, 2004

Penelope Bonsall/EAC/GOV
04/26/2004 03:16 PM

To Paul DeGregorio/EAC/GOV@EAC
cc
bcc
Subject Fw: ANSI Representative - HAVA bio

Here is a brief bio from Anne Caldas. Steve Berger called while en route and said he'd email his speaker's bio later this afternoon.

----- Forwarded by Penelope Bonsall/EAC/GOV on 04/26/2004 03:14 PM -----



"Anne Caldas"
<Acaldas@ansi.org>
04/26/2004 01:37 PM

To "pbonsall@eac.gov" <pbonsall@eac.gov>
cc "Amy A Marasco" <amarasco@ansi.org>, "Anne Caldas"
<Acaldas@ansi.org>
Subject ANSI Representative - HAVA bio

Hello -
I trust that this is acceptable.
Regards,
Anne

Anne Caldas
acaldas@ansi.org
Director, Procedures and Standards Administration
American National Standards Institute
www.ansi.org
25 West 43 Street, 4th Floor
New York, New York 10036
212-642-4914

Anne Caldas has held the position of Director of Procedures and Standards Administration at the American National Standards Institute (ANSI) for more than eight years. In this capacity, she is the primary staff support for the work of three of the primary committees that implement the American National Standards process: the ANSI Executive Standards Council (ExSC), the ANSI Board of Standards Review (BSR) and the ANSI Appeals Board. The related program areas for which she is responsible include the accreditation and audit of standards developers (of which there are about 200), the accreditation of US Technical Advisory Groups (TAGs) to International Standards Organization (ISO), the approval of standards as American National Standards (ANS) (approximately 10,000 ANS exist) and the implementation of a multi-level appeals process. Prior to her current position, she worked for twelve years at the Human Resources Administration of the City of New York, serving in a final capacity as Director of Procedures and Analysis for the Office of Employment Services. She holds a Masters Degree in public policy.

019021



UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-
OFFICE OF THE DIRECTOR

APR 27 2004

Commissioner DeForest B. Soaries, Jr.
Chairman, Election Assistance Commission
1225 New York Avenue, N.W.
Washington, D.C. 20005

Dear Commissioner Soaries:

I am pleased to notify the Commission that the following four individuals have agreed to serve on the Technical Guidelines Development Committee (TGDC) pending financial disclosure clearance and final approval by the Election Assistance Commission (EAC):

- Dr. Ronald L. Rivest
- Ms. Whitney Quesenbery
- Dr. Daniel Schutzer
- Mr. Patrick J. Gannon

I am confident that each of these individuals will bring unique technical competence in standards development to the challenging tasks that await the TGDC. In my conversations with the nominees, they each expressed an appreciation of the importance of the guidance that they will offer the EAC as we implement the Help America Vote Act of 2002. I have enclosed their resumés and am most willing to answer your questions concerning their qualifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Arden L. Bement, Jr.".

Arden L. Bement, Jr.
Director

Enclosures

NIST

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Technical Guidelines Development Committee

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Ronald L. Rivest, Ph.D.

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Professor Rivest is the Viterbi Professor of Computer Science in MIT's Department of Electrical Engineering and Computer Science. He is a member of MIT's Laboratory for Computer Science, a member of the lab's Theory of Computation Group and is a leader of its Cryptography and Information Security Group. He is also a founder of RSA Data Security. (RSA was bought by Security Dynamics; the combined company has been renamed to RSA Security.)

Professor Rivest has research interests in cryptography, computer and network security, and algorithms.

Professor Rivest is a Fellow of the Association for Computing Machinery and of the American Academy of Arts and Sciences, and is also a member of the National Academy of Engineering. Together with Adi Shamir and Len Adleman, he has been awarded the 2000 IEEE Koji Kobayashi Computers and Communications Award and the Secure Computing Lifetime Achievement Award. He has also received, together with Shamir and Adleman, the 2002 ACM Turing Award. Professor Rivest has received an honorary degree (the "laurea honoris causa") from the University of Rome. He is a Fellow of the World Technology Network and a Finalist for the 2002 World Technology Award for Communications Technology.

Professor Rivest is an inventor of the RSA public-key cryptosystem. He has extensive experience in cryptographic design and cryptanalysis, and has published numerous papers in these areas. He has served as a Director of the International Association for Cryptologic Research, the organizing body for the Eurocrypt and Crypto conferences, and as a Director of the Financial Cryptography Association.

He received a B.A. in Mathematics from Yale University in 1969, and a Ph.D. in Computer Science from Stanford University in 1974.

He has also worked extensively in the areas of computer algorithms, machine learning, and VLSI design.

Books and Publications:

{ Books }

Rivest, R.\L., A.\Sherman, and D.\Chaum (editors), { Proceedings CRYPTO 82}. New York: Plenum Press (1983).

019026

Rivest, Ronald, David Haussler, and Manfred K. Warmuth (editors), { Proceedings of the Second Annual Workshop on Computational Learning Theory } (Morgan Kaufmann, 1989). }

Cormen, T., C.E. Leiserson, and R.L. Rivest, { Introduction to Algorithms } (MIT Press/McGraw-Hill, 1990).

Hanson, G., G. Drastal, and R.L. Rivest (editors), { Computational Learning and Natural Learning }, (MIT Press, 1991).

Meyer, A., J. Guttag, R.L. Rivest, and P. Szolovits (editors), Research Directions in Computer Science: An (MIT) Perspective, (MIT Press, 1991).

Hanson, S.J., W. Remmele, and R.L. Rivest (editors), Machine Learning: From Theory to Applications, Lecture Notes in Computer Science No. 661, (Springer-Verlag, 1993).

Hanson, S.J., G.A. Drastal, and R.L. Rivest (editors), Computational Learning Theory and Natural Learning systems, Volume I: Constraints and Prospects, (MIT Press, 1994).

Hanson, S.J., T. Petsche, M. Kearns, and R.L. Rivest (editors), Computational Learning Theory and Natural Learning systems, Volume II: Intersections between Theory and Experiment, (MIT Press, 1994).

{ Recent Papers in Refereed Journals }

Kaliski, Burton S., Ronald L. Rivest, and Alan T. Sherman, "Is the Data Encryption Standard a Group?," { Journal of Cryptology }, vol 1 (1988), 3--36.

Ben-Or, Michael, Oded Goldreich, Silvio Micali, and Ronald L. Rivest, "A Fair Protocol for Signing Contracts," { IEEE Transactions on Information Theory }, vol 1 (1990), 40--46.

Linial, Nathan, Yishay Mansour, and Ronald L. Rivest, "Results on Learnability and the $\{V\}$ apnik- $\{C\}$ hervonenkis dimension," { Information and Computation }, vol 1 (Jan. 1991), 33--49.

Rivest, Ronald L., and Robert E. Schapire, "Inference of Finite Automata Using Homing Sequences," { Information and Computation } vol 2 (April 1993), 299--347

Rivest, Ronald L., and Robert H. Sloan, "On Choosing between Experimenting and Thinking when Learning," { Information and Computation }, vol 1 (September 1993), 1--25.

Goldman, Sally A., Ronald L. Rivest, and Robert E. Schapire, "Learning Binary Relations and Total Orders," { SIAM Journal of Computing } vol 5 (October 1993), 1006--1034.

Rivest, Ronald L., and Robert E. Schapire, "Diversity-Based Inference of Finite Automata," { Journal of the ACM }, vol. 3 (May 1994), 555--589.

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Rivest, Ronald L., and Robert Sloan, "A Formal Model of Hierarchical Concept Learning," { Information and Computation } vol 1 (October 1994), 88-114.

Betke, Margrit, Ronald L. Rivest, and Mona Singh, "Piecemeal learning of an unknown environment," { Machine Learning } (vol 2/3 (February/March 1995), 231--254.

Gillman, David, and Ronald L. Rivest, "Complete Variable-Length 'Fix-Free' Codes," { Designs, Codes, and Cryptography } vol 2 (March 1995), 109--114.

Gillman, David W., Mojdeh Mohtashemi, and Ronald L. Rivest, "On Breaking a Huffman Code," { IEEE Transactions on Information Theory } vol 3 (May 1996), 972--976.

Bellare, Mihir, and Ronald L. Rivest, "Translucent Cryptography---An Alternative to Key Escrow and its implementation via fractional oblivious transfer," { Journal of Cryptology } vol 2 (1999) 117--140.

Awerbuch, Baruch, Margrit Betke, Ronald L. Rivest, and Mona Singh, "Piecemeal Graph Exploration by a Mobile Robot," { Information and Computation } Vol 2 (August 1999), 155--172.

Ronald L. Rivest, "Permutation Polynomials Modulo 2^w ," { Finite Fields and Their Applications } (2001), 287--292.

{ Recent Papers in Refereed Conferences }

Rivest, R. L., "Finding Four Million Large Random Primes," { Proceedings CRYPTO 90 }, (Springer 1991), 625--626.

Rivest, R. L., "Cryptography and Machine Learning," { Proceedings ASIACRYPT '91 }, (Springer 1993), 427--439.

Rivest, R. L., "Electronic Lottery Tickets as Micropayments," { Proceedings Financial Cryptography '97 }, (Springer 1997), 307--314.

Rivest, R. L., "Perspectives on Financial Cryptography," { Proceedings Financial Cryptography '97 }, (Springer 1997), 145--149.

{ Other Recent Major Publications }

Ronald L. Rivest and Adi Shamir, "PayWord and MicroMint: Two Simple Micropayment Schemes," in { Proceedings 1996 International Workshop on Security Protocols }, (Springer Lecture Notes in Computer Science Number 1189, edited by Mark Lomas, 1997), pages 69--87.

Ronald L. Rivest, "Chaffing and Winnowing: Confidentiality without Encryption,"

019028

{ CryptoBytes } (RSA Laboratories), Volume 4, Number 1, 12--17 (Summer 1998). }

Oded Goldreich, Birgit Pfitzmann, and Ronald L. Rivest, "Self-Delegation with Controlled Propagation - or - What If You Lose Your Laptop," {Proceedings CRYPTO '98 (Lecture Notes in Computer Science No. 1462)} (Springer-Verlag, August 1998), pages 153-168. }

Ronald L. Rivest, "The Beer Bottle Cipher," CCE Quarterly Journal (Pricewaterhouse Coopers Cryptographic Center of Excellence), Issue 3 (1999), 28--30. }

{54} { Anna Lysyanskaya, Ronald L. Rivest, Amit Sahai, and Stefan Wolf, "Pseudonym Systems," {emph{Selected Areas in Cryptography '99}} (Springer Verlag '00), Lecture Notes in Computer Science No. 1758 (edited by H. Heys and C. Adams), pages 184--199. }

Recent Cryptography and Security Lectures

- *Micropayments Revisited* by Silvio Micali and Ronald L. Rivest. (Proceedings of the Cryptographer's Track at the RSA Conference 2002, Bart Preneel (ed.), Springer Verlag CT-RSA 2002, LNCS 2271, pages 149--163.)
- *The Untrusted Computer Problem and Camera-Based Authentication*, by D. Clarke, B. Gassend, T. Kotwal, M. Burnside, M. van Dijk, S. Devadas, and R. L. Rivest. *Lecture Notes in Computer Science 2414, Proceedings of the International Conference on Pervasive Computing (Pervasive2002)*, pages 114-124, August 2002.
- *Access-Controlled Resource Discovery for Pervasive Networks*, by S. Raman, D. Clarke, M. Burnside, S. Devadas and R. L. Rivest. *Proceedings of the 18th ACM Symposium on Applied Computing (Security Track)*, March 2003.
- *Tweakable Block Ciphers* by Moses Liskov, Ronald L. Rivest, and David Wagner. *Proceedings CRYPTO 2002* (Springer-Verlag, Lecture Notes in Computer Science No. 2442, Moti Yung(ed.), 2002), pages 31--46.
- *Making Mix Nets Robust for Electronic Voting by Randomized Partial Checking* by Markus Jakobsson, Ari Juels, and Ronald L. Rivest. In D. Boneh, ed., *USENIX Security '02*, pp. 339-353. 2002.
- *Proxy-Based Security Protocols in Networked Mobile Devices* by M. Burnside, D. Clarke, T. Mills, A. Maywah, S. Devadas, and R. Rivest. *Proceedings of the 17th ACM Symposium on Applied Computing (Security Track)*, pages 265-272, March 2002.

**Whitney Quesenbery
Usability Professionals' Association**

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High Bridge, NJ 08829

908-638-5467
whitneyq@wqusability.com

Biography

Whitney Quesenbery is the director of the UPA Voting and Usability Project, a role she took on when she joined the board just days after the 2000 US Presidential election. This project has focused on the human side of the voting experience, and has worked to raise awareness of the need for usability and user-centered design in voting systems as with all technology. Whitney was on the advisory council for the FEC project on human factors in voting systems. A discussion group brings together usability advocates and researchers from around the world. Information is available on the UPA web site – www.usabilityprofessionals.org

In her 'civilian' life, Whitney Quesenbery is a user interface designer, design process consultant, and highly regarded speaker. She is an expert in developing new concepts that achieve the goal of meeting business, user, *and* technology needs. She has extensive user interface design experience and has produced award winning multimedia products, user interfaces, web sites, and software applications.

She is the owner and principal consultant for Whitney Interactive Design, LLC (www.WQusability.com) where she continues the work begun during her dozen years at Cognetics Corporation. Whitney's projects ranged from online financial news retrieval to hospital management software, web applications, and corporate information tools for companies such as the TriZetto Group, FDA, Open University, Armstrong, Novartis, Deloitte Consulting, Dow Jones, McGraw-Hill, Siemens, Hewlett-Packard, and Eli Lilly.

Whitney is active in the user experience community as a member of the Board of Directors for the Usability Professionals' Association (UPA) and the past-manager of the Society for Technical Communication (STC) Special Interest Group on Usability.

Experience

2002 - Present: Whitney Interactive Design, LLC

Consultancy in user-centered design, interface design and usability

Clients include:

- Trizetto
- ITG - Interpersonal Technology Group
- IRS
- Blackbaud

1990 - 2002: Cognetics Corporation

Principal and Senior Vice President for Design

Key accomplishments

- One of the primary developers for LUCID, a user-centered approach to user experience design
- Product management and documentation for Hyperties 3.0 and 4.0, released in 1992 and 1995

019030

- Usability training and process implementation for Cognetics and clients
- Developed professional skills evaluation process for staff designers
- Principal or lead designer for design and consulting projects:
 - Web-based applications for healthcare, pharmaceutical, financial services
 - Siemens Health Systems *Soarian*
 - The McGraw-Hill Companies
 - ADP
 - StreamNet
 - Cynocom *Asyst*
 - Con Edison
 - Intranet design and information architecture
 - McNeil
 - Novartis Consumer Health *InfoWeb*
 - Deloitte Consulting
 - Sanofi
 - Web site design and usability
 - Eli Lilly
 - International Center of Photography
 - NSI
 - Congressional Information Systems
 - Cognetics Corporation
 - Online books and reference
 - Hewlett Packard *Laser Jet 4 Travel Guide*
 - The Productivity Shoppe *Get Smart*
 - Gale Research
 - Primary Source Media *American Journey*
 - Research Publications *Broadcast News*
 - Union Carbide *Safety Manual*
 - Lederle Pharmaceuticals
 - Multimedia and interactive television
 - Dow Jones Investor Network
 - Ameritech *Interactive TV Prototypes*
 - AT&T/Lucent *PDD - Capabilities Demo*
 -

1977 - 1990: Theatrical Lighting Designer

New York and regional theatre, dance and opera

- Arden Theatre Company
- Movement Theatre International
- Lenox Arts Center
- Hyde Park Festival Theatre
- American Music Theatre Festival
- Berkshire Ballet Company
- Center for Contemporary Opera
- LaMama E.T.C.
- Laurie Anderson's *United States I - IV*
- *Poppie Nongena*

Professional Society Affiliations

Usability Professionals' Association

- Board of Directors, 2000 - present
- Certification for Usability Professionals project, 2002

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- Voting and Usability project, 2000-present
- Conference Presentations, 1999-2002

Society for Technical Communication

- Usability SIG Webmaster, 1997 - present
- Conference Program Manager for Usability, 2002
- Usability SIG Manager, 1999 - 2002
- Distinguished Chapter Service Award, 1997
- Philadelphia Chapter Webmaster, 1995 - 1998
- STC International Online Competition Judge, 1996-1997
- Conference Presentations, 1995-2002

ACM SIGCHI (Special Interest Group on Computer-Human Interaction)

- Conference Panel, 2001: Ethics in HCI
with Rolf Molich; Brenda Laurel, Chauncey Wilson, Carolyn Snyder

United Scenic Artists

- Lighting Designer #3259, 1984-present

Education

- Bryn Mawr College
- National Theatre Institute

Awards and Honors

- E-Comm Ohio Pioneer Awards
National Judge, 2002
- UTEST Advisory Council
- 2001 Frank R. Smith Outstanding Journal Article
"On Beyond Help - Use Assistance and the User Interface"
- STC Competitions Awards
NSI web site, 1998
AT&T PDD, Best in Show 1996
Productivity Shoppe *Get Smart*, 1996
Cognetics web site, 1996-1997
Hyperties documentation, 1996-1997
Primary Source Media *American Journey*, 1995
Hewlett Packard *LaserJet 4 Travel Guide*, 1992

Publications

Balancing the 5Es

Functional requirements answer the question, "What does this program have to do?" Usability requirements answer different questions: How do users approach this work? How do they think about the tasks? How do they judge a successful experience?
Cutter IT Journal - February 2004, pp 4-11

"Starting from People: Designing Usable Voting Systems"

An article based on my presentation at the NIST Symposium on Building Trust and Confidence in Voting Systems, December 10-11, 2003

"Designing a Search People Can Really Use"

Intercom, December 2003, p 18-21

Lessons on how to help people succeed with search, from usability research with consumers using online health information.

Reprinted with permission from Intercom, the magazine of the Society for Technical Communication.

"Dimensions of Usability: Opening the Conversation, Driving the Process"

Proceedings of the UPA 2003 Conference, June 2003

A look at using the 5Es as an advocacy and communications tool"

"Who is in Control? The Logic Underlying the Intelligent Technologies Used in Performance Support"

Technical Communication, Volume 49, Number 4, November 2002 (Frank R. Smith Outstanding Journal Article Competition - Outstanding Issue 2002)

An exploration of technologies such as intelligent agents, information visualization, search engines and collaborative filtering and how they related to performance support.

"Building Blocks to a Body of Knowledge for User-Centered Design: To Certify or Not to Certify"

Usability Interface, STC Usability SIG, April 2002

A report on activities investigating certification for usability professionals.

"When the show must go on, it's time to collaborate or die."

Boxes and Arrows, March 2002

What I learned about UI design while working in the theatre.

"What We Don't Know About Internet Voting and Usability"

Georgia Tech Research Institute workshop on Internet Voting, November 13-14, 2001

"Voting and Usability: Lessons Learned from the 2000 Presidential Election"

STC-PMC News & Views, November 2001

A look at some of the usability issues in the 2000 Presidential election ballot crisis

"Building A Better Style Guide"

Proceedings of Usability Professionals' Association, 2001

A report on ways of using style guides to build consensus within a design team

"What's in a Name?"

Design Matters, STC Information Design SIG, May 2001

A short article looking at the various titles and how they relate to the different skills needed for usability.

"Using a Style Guide to Build Consensus"

Usability Interface, STC Usability SIG, April 2001

A short introduction to the social aspects of style guides.

"Applying a UCD Process to Implementing a UCD Process"

Proceedings of the 48th Annual Conference, Society for Technical Communication, 2001

A look at how user-centered design can be applied to implementing usability and a better design process.

"What Does Usability Mean: Looking Beyond 'Ease of Use'"

Proceedings of the 48th Annual Conference Society for Technical Communication, 2001

This paper accompanied a panel with Caroline Jarrett, Judy Ramey and Ginny Redish and introduces the 5Es concept of dimensions of usability

"Storytelling: Using Narrative to Communicate Design Ideas"

Presentation at the 48th Annual Conference Society for Technical Communication, 2001

Storytelling is a powerful way to explain complex concepts, and present a vision for a design

"On Beyond Help - User Assistance and the User Interface"

Technical Communication, STC, April 2001.

Winner 2001 Frank R. Smith Outstanding Journal Article

How to make a user interface helpful, by designing for different user approaches to information.

"Voters Learn the Importance of Usability"

Usability Interface, STC Usability SIG, January 2001

A few lessons from the November 2000 election and how they apply to usability.

"UPA 99 Workshop Report: Crossing the Chasm - Promoting Usability in the Software Development Community"

Common Ground, UPA, Vol 10 No 1, March 2000

"Lessons from the InfoWeb - Creating a Successful Knowledge Management System"

Presented at Hot Trends for Communicators - STC Region 5 Conference, October 1999

"Documentation's Holistic Role"

Journal of Computer Documentation, ACM-SIGDOC, Vol 23 No 4, November 1999

"Designing Library Reference CD-ROM Interfaces for Usability"

Common Ground, UPA, Vol 7 No 4, October 1997

019033

"Designing for Interactive Television"

Published online, 1997

"The Basics of Graphics That Really Do Work Online"

Hyperviews (STC Online SIG) Vol 3 No 2, Summer 1996

"Get Smart: Interface Design and Production Meet Editorial on a New CD-ROM Magazine"

Proceedings of the 43rd Annual Conference, Society for Technical Communication, 1996

"UI Design - Keys to the Interactive Kingdom"

IEEE Multimedia Conference, Washington DC, May 1995

An American Journey: Designing the Interface for an Electronic Document"

Proceedings of the 42th Annual Conference Society for Technical Communication, 1995

"Steps to Success: Applying an Interface Design Methodology to Electronic Documentation"

Spectrum 94, Rochester, New York. March 1994

"Going Online: Developing a User Interface for an Online Document" STC-PMC News & Views, Vol

29, No. 3, November 1993

"Interface Design for Online Documents"

American Association of University Publishers, June 1993

Daniel Schutzer, Ph.D.

**Vice President & Director of External Standards and Advanced Technology, e-Citi, CitiGroup
Financial Services Technology Consortium, Board Chairman
Chairman ISO Subcommittee 2
Fellow and Advisory Board National Academy of Sciences
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Advisory Committee on Online Access and Security -- Nomination, P004807.
Nomination submitted by Citigroup, January 7, 2000.

Currently responsible for directing and coordinating Citigroup's advanced technology efforts and Citigroup's senior representation at external organizations and standards bodies. This includes ensuring research and standards activities are properly focused and aligned with business goals and priorities; formulating and executing business-driven technology directions and strategies; providing overall management, assessment, and prioritization of research and standards activities; and keeping the Citibank highly innovative. Areas of focus include electronic banking, payments and electronic commerce, bill presentment and payment, portfolio and risk management, financial engineering and new product design, customer behavioral modeling, mathematical marketing analyses and simulations, fraud detection and control, security over computer networks. Advanced technologies under investigation include agent technology, XML, machine learning, multimedia, biometrics, image and voice processing, smart cards and secure tokens.

Previous positions include Technical Director Naval Intelligence, Technical Director Navy Command, Control and Communications, and Program Manager Sperry Rand. Also worked for Bell Labs, Syracuse University and IBM.

Currently serving as Research Professor of Information Technology at Rutgers Center of Management, Integration and Connectivity (CIMIC), and teaching part time at Iona College in New Rochelle, New York, and George Washington University in Washington D.C.

EDUCATIONAL BACKGROUND: BSEE, College of City of New York, MSEE and Ph.D. Syracuse University

PUBLICATIONS: Authored over 65 publications and 7 books: Parallel and Distributed Processing, Application of Emerging Technologies in Business, Applied Artificial Intelligence, Military Communications, Command and Control, a chapter on Financial Risk Management in a Financial Management Handbook, and a Chapter in a Book on Electronic Commerce.

Patrick J. Gannon

President and CEO, OASIS

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USA

978 667 5115 Voice

978 667 5114 Fax

President and CEO of the Organization for the Advancement of Structured Information Standards (OASIS). In addition to serving on the OASIS Board of Directors, Mr. Gannon has served since 2000 with the United Nations Economic Commission for Europe (UNECE), as Chairman of the Team of Specialists for Internet Enterprise Development, which advises governments in transitional economies on best practices for electronic business. He also serves on the ebXML (electronic business using eXtensible Markup Language) Joint Coordinating Committee together with management from UN/CEFACT. He has worked for BEA Systems, where he served as Senior Vice President in the E-Commerce Integration Division. Prior to BEA, Mr. Gannon served as Vice President of Marketing and Industry Programs at Netfish Technologies and as Vice President of Strategic Programs for the CommerceNet Consortium, directing research and development efforts in new Internet commerce standards such as XML. While at CommerceNet, he served as the first Project Leader for RosettaNet and as Executive Director for the Open Buying on the Internet (OBI) initiative. Mr. Gannon is co-author of the book: "Building Database-Driven Web Catalogs," and is an international speaker on electronic business. Mr. Gannon has also provided guidance to governmental leaders (ministers and heads of state) on adoption of electronic business (Information & Communication Technology) strategies to facilitate economic growth; which has included Lee Teng-hui, President of the Republic of China, and Askar Akayev, President of the Kyrgyz Republic.

019036

Arden L. Bement, Jr.
Acting Director
National Science Foundation (NSF)

Dr. Bement joined NSF from the National Institute of Standards and Technology, where he has been director since Dec. 7, 2001. As head of NIST, he oversees an agency with an onsite research and administrative staff of about 3,000, complemented by a NIST-sponsored network of 2,000 locally managed manufacturing and business specialists serving smaller manufacturers across the United States.

Prior to his appointment as NIST director, Bement served as the David A. Ross Distinguished Professor of Nuclear Engineering and head of the School of Nuclear Engineering at Purdue University. He has held appointments at Purdue University in the schools of Nuclear Engineering, Materials Engineering, and Electrical and Computer Engineering.

Bement came to the position as NIST director having previously served as head of that agency's Visiting Committee on Advanced Technology, the agency's primary private-sector policy adviser and as head of the advisory committee for NIST's Advanced Technology Program. Along with his NIST advisory roles, Bement served as a member of the NSF's National Science Board from 1989 to 1995.

Bement joined the Purdue faculty in 1992 after a 39-year career in industry, government, and academia.

He holds an engineer of metallurgy degree from the Colorado School of Mines, a master's degree in metallurgical engineering from the University of Idaho and a Ph.D. in metallurgical engineering from the University of Michigan. He is a member of the U.S. National Academy of Engineering.

019037

Arden L. Bement, Jr.
Acting Director
National Science Foundation

Arden L. Bement, Jr., became Acting Director of the National Science Foundation on February 22, 2004.

He joins NSF from the National Institute of Standards and Technology, where he has been director since Dec. 7, 2001. As head of NIST, he oversees an agency with an annual budget of about \$773 million and an onsite research and administrative staff of about 3,000, complemented by a NIST-sponsored network of 2,000 locally managed manufacturing and business specialists serving smaller manufacturers across the United States. Prior to his appointment as NIST director, Bement served as the David A. Ross Distinguished Professor of Nuclear Engineering and head of the School of Nuclear Engineering at Purdue University. He has held appointments at Purdue University in the schools of Nuclear Engineering, Materials Engineering, and Electrical and Computer Engineering, as well as a courtesy appointment in the Krannert School of Management. He was director of the Midwest Superconductivity Consortium and the Consortium for the Intelligent Management of the Electrical Power Grid.

Bement came to the position as NIST director having previously served as head of that agency's Visiting Committee on Advanced Technology, the agency's primary private-sector policy adviser; as head of the advisory committee for NIST's Advanced Technology Program; and on the Board of Overseers for the Malcolm Baldrige National Quality Award.

Along with his NIST advisory roles, Bement served as a member of the U.S. National Science Board from 1989 to 1995. The board guides NSF activities and also serves as a policy advisory body to the President and Congress. He also chaired the Commission for Engineering and Technical Studies and the National Materials Advisory Board of the National Research Council; was a member of the Space Station Utilization Advisory Subcommittee and the Commercialization and Technology Advisory Committee for NASA; and consulted for the Department of Energy's Argonne National Laboratory and the Idaho National Engineering and Environmental Laboratory.

Bement joined the Purdue faculty in 1992 after a 39-year career in industry, government, and academia. These positions included: vice president of technical resources and of science and technology for TRW Inc. (1980-1992); deputy under secretary of defense for research and engineering (1979-1980); director, Office of Materials Science, DARPA (1976-1979); professor of nuclear materials, MIT (1970-1976); manager, Fuels and Materials Department and the Metallurgy Research Department, Battelle Northwest Laboratories (1965-1970); and senior research associate, General Electric Co. (1954-1965).

He has been a director of Keithley Instruments Inc. and the Lord Corp. and was a member of the Science and Technology Advisory Committee for the Howmet Corp. (a division of ALCOA).

Bement holds an engineer of metallurgy degree from the Colorado School of Mines, a master's degree in metallurgical engineering from the University of Idaho, a doctorate degree in metallurgical engineering from the University of Michigan, an honorary doctorate degree in engineering from Cleveland State University, and an honorary doctorate degree in science from Case Western Reserve University. He is a member of the U.S. National Academy of Engineering.

019038

Paul W. Craft

Biographical Sketch

Mr. Craft is a true Florida native, born in Tallahassee, Florida.

He graduated from Florida State University in 1976 with a B.S. in Business and Hotel Restaurant Administration. After 6 years in restaurant management he returned to Florida State for additional work in accounting and became a Certified Public Accountant in 1986 and a Certified Information Systems Auditor in 1992.

From 1982 to 1991, he was employed as an auditor by the Florida Department of Revenue. He began as a tax compliance auditor was promoted to an audit manager. In 1987 he was picked to head a task force investigating embezzlements within the tax refund section. Using a combination of statistical sampling, internal control analysis and computer modeling the investigation concluded with successful prosecutions.

In 1991 he was hired by the Florida Department of State as a Computer Audit Analyst in the Voting Systems Certification Section. In 1994 he began managing the section. In 2001, the Florida Legislature put significant resources into elections reform including expanding the section into a bureau with Mr. Craft as Chief.

Since the early 1980's Mr. Craft has been active in the NASED ITA Board and its technical subcommittee. His Bureau of Voting Systems Certification has been instrumental in implementing Florida's 2001 election reforms, the 2002 election accessibility act, and is now implementing the provisions of HAVA.

Mr. Craft lives in Tallahassee with his wife, Debra Ann Corkhill, one bird and two cats.

Paul W. Craft

Certified Information Systems Auditor

Current Employment

Bureau Chief, Bureau of Voting Systems Certification, Division of Elections, Florida Department of State.

The Bureau consists of four sections:

The Voting System Section:

- establishes standards for computer based election systems, as well as testing and evaluating system compliance with existing state and federal election standards.
- provides oversight for the use of election systems by county election offices.
- provides technical assistance, expert witness, educational and management advisory services to county election offices.

The National Voter Registration Administration Section:

- provides oversight and training under the requirements of the Florida Voter Registration Act and the National Voter Registration Act.
- provides coordination for training programs and workshops conducted by the Division of Elections.
- coordinates publications for the Division of Elections.

The Data Processing Section

- designs, develops, maintains and supports users of the Divisions Of Elections' custom computer applications.
- manages the Divisions Of Elections' web presence.
(See <http://election.dos.state.fl.us>)
- maintains and operates the Florida Statewide Voter Registration Database.

019040

The Florida Voter Registration System Section

- design and development of the new Florida Voter Registration System for deployment in January 2006, under the Help America Vote Act.

Represent the State of Florida on the National Association of State Election Directors' Voting Systems Board and its Technical Standards Subcommittee. Serve as liaison with federal programs, make public presentations, and handle press contacts.

Education

Florida State University – B.S. Hotel and Restaurant Administration. Additional work in Accounting to meet Certified Public Accountant requirements. Continuing Professional Education to maintain CPA and CISA certifications.

Contact Information

Room 231, The Collins Building ♦ 107 West Gaines Street
♦ Tallahassee, Florida 32399-0250
Telephone 850-245-6220
Email: craft@paulcraft.net
Web Site: <http://paulcraft.net>

H. STEPHEN BERGER

President of the General Partner

stephen.berger@ieee.org

PROFILE

Professional project manager with specialization in:

- ❶ **Government and Industry Relations,**
- ❷ **Advanced technology business planning,**
- ❸ **Standards development and regulatory management.**

20 years of product development and technology planning experience. Member of the IEEE Standard Board and chair of the IEEE EMC Society Standards Development Committee. Currently chairs IEEE Project 1583, standard for voting equipment. Project management experience in Telecommunications, Information Technology and Instrumentation Industries, with strong record, in the areas of EMC (Electromagnetic Compatibility), RF safety and Disability Issues.

SELECTED ACCOMPLISHMENTS

IEEE Standards Board and New Standards Committee

1st Vice-President, NARTE (National Association of Radio and Telecommunications Engineers)

Chair, IEEE EMC Society Standards Development Committee

Invented the EHR GTEM, patented, gained FCC approval and implemented its use, improving test efficiency by >80%. Awarded Siemens' highest award for technical contribution to the business.

Established EMCO's electromagnetic field sensing products line base upon technology transfer with NIST in Boulder, Co. This product line grew to 15% of total revenues in 3 years.

Current President and co-founder of the Association of Access Engineering Specialists (AAES)

Member of 2 US Access Board Federal Advisory Committee:

Telecommunications Access Advisory Committee (TAAC) (1996-1997)
and

Electronic Information Technology Access Advisory Committee (1998-1999)

Invited presenter on disability access at EU Ministerial Conference, April 2000 in Lisbon, Portugal

EMC AND ENVIRONMENTAL TESTING

REGULATORY COMPLIANCE

Improved test department throughput by 5 times, with no increase in personnel. This was accomplished by extensive automation, the invention of new, patented test technology.

Increased total revenues by 15% at EMCO because of antenna and instrumentation designs

Member of key standards committees for EMC, RF Health, Accessibility and related areas.

PROFESSIONAL AWARDS

IEEE Standards Medallion, August 1993.

Commendation for contributions to IEEE EMC Society's Standards Efforts, 1988 & 1994.

Certificate of Appreciation for RESNA for contributions to the field of rehabilitation engineering, 1997.

SHHH (Self Help for Hard of Hearing People) Friend of People with Hearing Loss 2001 award.

PATENTS

6,744,750: Replicating and Recombinant Networking Systems and Methods for Wireless Networks

6,684,063: Integrated Hearing Aid for Telecommunications Devices

6,380,896: Circular polarization antenna for wireless communication system

6,225,917: Electromagnetic Field Probe Having a Non-Electrical Transmission Modality

5,754,054: Apparatus and Method for Determining the Source and Strength of Electro-magnetic Emissions

5,589,773: System and Method for Making Electromagnetic Measurements Using a Tilttable Transverse Electromagnetic Cell and a Fixed Tilt Sample Holder

EP00805562A3: Radio-Frequency Hearing Aid Protector for Wireless Communications Products

PROFESSIONAL BACKGROUND

019043

TEM CONSULTING, LP

2000-

Present

President of the General Partner

SIEMENS INFORMATION AND COMMUNICATIONS MOBILE 1990-
2000

Project Manager, Standards & Regulations 1999-

2000

Senior Engineer, Wireless Terminals Compliance 1996-

1999

Technical Lead, Hardware Design Assurance 1990-

1996

THOMAS-CONRAD CORP.

1988-

1990

Senior Engineer, Digital Design

THE ELECTRO-MECHANICS COMPANY (EMCO)

1985-1988

Director for Field Sensing Products

DATAPPOINT CORP.

1980-

1985

Engineer, EMC and environmental compliance testing

EDUCATION

BS, Physics

University of Wisconsin, Madison, WI.

TEM Consulting, LP

stephen.berger@ieee.org © Copyright 2004, TEM Consulting.

140 River Rd

(512) 864-3365 - Phone

Georgetown, Tx. 78628

(512) 869-8709 - FAX

019044

Biographical Sketch

Donetta Davidson, Colorado Secretary of State

"For me, growing up in a rural area really exemplified the community family, it is what inspired me to run for office. Getting involved in the Colorado Community has been one of the most rewarding experiences of my life. I highly recommend it!"

Donetta Davidson was born into a military family in Liberal, Kansas in 1943. She became a Coloradoan shortly thereafter when her family moved first to Two Buttes then to Las Animas where they settled. When ever possible Donetta spends time with her family, son Todd; daughter and son-in-law Trudie and Todd Berich and granddaughters Brittany and Nicole:

Official Positions:

- Bent County Clerk and Recorder, Las Animas, Colorado
Elected in November 1978 and served until January 1986
- Director of Elections, Colorado Department of State
Appointed in January 1986 and served until December 1994
- Arapahoe County Clerk and Recorder, Littleton, Colorado
Elected in November 1994, re-elected in November 1998, and served until July 21, 1999
- Colorado Secretary of State
Appointed by Governor Bill Owens on July 22, 1999
Elected in November 2000
- Treasurer, National Association of Secretaries of State, Elected in July 2003
- Member of the Elections Committee for the National Association of Secretaries of State
- Will serve as the President of the National Association of Secretaries of State in 2006

Experience:

- Elections Officer, Colorado Department of State, supervising the county clerks in all election matters pertaining to the Primary/General elections, including mail ballot; assisting with recall issues; municipal, special district, and school district elections
- Legislative liaison for the Secretary of State
- Legislative Liaison for the County Clerk Association
- Speaker at six Postal Training Seminars held in various cities, 1998
- Chairman of committee that developed the only logo ever used by election officials for mailings and a User's Guide for election officials and post offices to facilitate lower mailing costs, as well as, ensuring delivery of official election mail to electors

- Speaker, National Postal Forum, 1998
- Participant, US Postal Service National Training broadcast, 1998
- Expert speaker on the election process
- Participation on state and federal levels concerning legislative changes

Accomplishments:

- Recipient, Las Animas High School Business Department, Employer of the Year, 1984
 - President, Colorado State Association of County Clerk and Recorders, 1983 to 1984
 - Executive Board Member, National Association of County Clerk and Recorders, 1995 to 1999
 - President, National Association of State Election Directors (NASSED), 1994
 - Recipient, Henry Toll Fellowship of Council of State Governments, 1993
 - Member, International Association of Clerks, Recorders, Election Officials, and Treasurers (IACREOT), 1995 to 1999
 - Appointment to Federal Election Commission Advisory Panel, 1995 to present
 - Chairman, Legislative Committee for Colorado State Association of County Clerk and Recorders, 1996 to 1999
 - Chairman, Joint Elections Officials Liaison Committee (JEOLC) Postal Service Task Force, 1997 to present
 - Appointment to the Election Center Board of Directors, 1998 to present
 - Appointment to the National Association of State Election Directors Voting Systems/Independent Test Authority Accreditation Board, 1998 to 2003
-

019046

ALICE P. MILLER

Alice P. Miller was appointed Executive Director by the Board of Elections and Ethics in July 1996, while serving as the General Counsel for the agency. Uniquely, she served in the dual capacity and was able to sustain the major operations of the Board during two major elections: the City Council Primary and Presidential election cycles. This required maintaining and promoting the Board's mission from both a legal and administrative perspective. Since her appointment as the permanent Executive Director in 1997, progress at the agency to date has included:

- modifying the training component of the pollworker unit to include professionally produced training videos that are used to supplement the in-house hands on training, and testing of election day workers; the video ultimately minimizes the costs for outside trainers, and ensures that all assigned election day workers receive uniform information about election day processes and procedures;
- reorganization of agency operations, including combining the data processing unit to function in conjunction with the registration processing component of the agency, thereby resulting in direct supervision and minimizing functions of the systems management branch;
- upgrading and enhancement of the 20 year old voter registration and ballot tabulation system to an optical scanning operation that will add ease to the voting process, reduce election day support requirements, and centralized daily in-house operations;
- implementing for the first time ever a major comparison of the local voter roll with contiguous jurisdictions and instituting procedures for making referrals of obvious violators to the Office of the United States Attorney for investigation and possible convictions;
- maintenance of the voter roll by implementing a data exchange program with other District government agencies to track individuals that may have failed to notify the Board of a change of address or residency; checking voter registration information by utilizing the National Change of Address Program (NCOA) and the National Social Security Death List;
- improvement of customer service through the development of the Board's website; the continued development of the website has evolved from an initial posting of twenty-five pages in 1997 to a current posting of 1100 pages, providing information, documents and features required in any first class "Election Website"; and the website maintains a design that allows for easy navigation and is accessible to all Internet users, regardless of their expertise or the sophistication of their equipment;

- developing thorough, comprehensive, and goal-oriented annual performance plans for fiscal year operations prior to budget approval;
- installation of signa-scan or "digital signatures" as a technology upgrade to in-house operations; the module of signa-scan, a signature verification and retrieval system, is designed to decrease the time required for verifying signatures on petitions and absentee ballots, while increasing the overall accuracy of the process.

Since Ms. Miller's tenure, the agency has made significant advancements with management and administrative control through the effective use of technology, orderly planning and procedures, development of comprehensive agency annual performance plans, and continued trouble-free elections. Public confidence in the District's election system has continued to rise and increases in voter participation in the overall process has been noted.

Professional Appointments:

Vice President, National Association of State Election Directors (NASSED): (2001-present), Treasurer (1999-200), Northeast Regional Representative (1998-1999); Committee on Legislative Affairs (2001-present)

Board Member, The Election Center Professional Education Program (1999-present); Co-Chair, The Committee on Ethics and Professional Responsibility, (2001-present)

Member, Metropolitan Council of Government Election Officials Technical Committee

Member, International Foundation for Election Systems (IFES), Steering Committee for Collection of Election Resources in the United States (CERUS) Project

Bar Admissions:

United States Supreme Court, United States Court of Appeals for the District of Columbia, United States District Court for the District of Columbia, and District of Columbia Court of Appeals.

Other Professional Activities:

Testimony before Congressional Black Caucus on election reform. Presenter for the League of Women Voters, District of Columbia Commission on Aging, International Foundation for Election Systems International Visitors Program,

Institute of International Education Foreign Visitors Program and The National
Association of State Election Directors

Previous Employment

From 1988 to 1997, Ms. Miller served as the senior staff attorney and later the General Counsel for the D.C. Board of Election and Ethics. As the chief legal officer for the Board of Elections and Ethics, she was responsible for representing the Board in all court proceedings on matters related to the elections process and challenges thereto. In addition, she drafted and prepared for final adoption all regulations governing the election process in the District of Columbia.

Significantly, for a period of approximately eighteen month, Ms. Miller performed both the duties associated with the offices of the General Counsel and that of the Executive Director of the Board of Elections. Most importantly, the timing of this appointment of dual responsibilities came at the onset on the Council Primary and Presidential elections. Both major elections were successful and the total operations of the agency commenced without incident. The Presidential Election was eventful in that some residents of the local Georgetown area challenged the right of student voters. That challenge resulted in ongoing contentious litigation which resulted in the Board's position of allowing students access to the franchise being continuously upheld.

Ms. Miller also worked for a brief period with the Council of the District of Columbia. She has also worked as a law clerk and later associate attorney for the law firm of Jack H. Olender and Associates, P.C..

EDUCATION

Ms. Miller received her law degree from Northeastern University. She received her B.A. degree from Boston College, graduating cum laude from the College of Arts and Sciences Honors Program.

Personal:

Ms. Miller was born in 1956 in Bethesda, Maryland, raised in Washington, DC, married in 1983, and has two children. The Millers have resided as a family in Washington, DC since 1987.

019048

Anne Caldas

Director, Procedures and Standards Administration
American National Standards Institute
25 West 43 Street, 4th Floor
New York, New York 10036

Anne Caldas has held the position of Director of Procedures and Standards Administration at the American National Standards Institute (ANSI) for more than eight years. In this capacity, she is the lead staff support for the work of three of the primary committees that implement the American National Standards process: the ANSI Executive Standards Council (ExSC), which accredits developers of American National Standards; the ANSI Board of Standards Review (BSR), which approves standards as American National Standards; and the ANSI Appeals Board, which is the final level of appeal at ANSI. The related program areas for which she is responsible include the accreditation and audit of standards developers (of which there are about 200), the accreditation of US Technical Advisory Groups (TAGs) to International Standards Organization (ISO), the approval of standards as American National Standards (ANS) (approximately 10,000 ANS exist) and the implementation of a multi-level appeals process. Prior to her current position, she worked for twelve years at the Human Resources Administration of the City of New York, serving in a final capacity as Director of Procedures and Analysis for the Office of Employment Services. She holds a Masters Degree in public policy.

019049

BRITAIN J. WILLIAMS

Dr. Williams is a Professor Emeritus of Computer Science and Information Systems at Kennesaw State University, Kennesaw, Georgia. Kennesaw State is a senior university in the University System of Georgia.

From 1986 to the present he has served as a consultant to the FEC Clearinghouse for Election Administration. In this capacity, he was involved in the development of the original Voting Systems Standards published in 1990 and the revision of the Voting Systems Standards that is currently underway.

From 1986 until 1988 and from 1993 until the present, Dr. Williams has served the Elections Division of the Office of the Georgia Secretary of State as a technical advisor to assure that voting systems proposed for use in the State are in compliance with the FEC Standards, the Rules of the Secretary of State, and the Georgia Election Code. He is also a consultant on matters related to voting system certification for several other states.

From 1994 until the present, Dr. Williams has served as Chairman of the NASED Voting Systems Board Technical Advisory Committee. This committee provides technical advice to the NASED Voting Systems Board on matters related to the interpretation of the FEC Voting System Standards. The NASED Voting Systems Board is responsible for the implementation of the FEC Voting System Standards.

Daniel Schutzer, Ph.D.

**Vice President & Director of External Standards and Advanced Technology, e-Citi, CitiGroup
Financial Services Technology Consortium, Board Chairman
Chairman ISO Subcommittee 2
Fellow and Advisory Board National Academy of Sciences
Citibank, 909 Third Avenue, 32nd floor, New York, N.Y. 10022
(212) 559 1876, Fax (212) 832 7497
dan.schutzer@citicorp.com, <http://www.citibank.com>, <http://www.fstc.org>**

Advisory Committee on Online Access and Security -- Nomination, P004807.
Nomination submitted by Citigroup, January 7, 2000.

Currently responsible for directing and coordinating Citigroup's advanced technology efforts and Citigroup's senior representation at external organizations and standards bodies. This includes ensuring research and standards activities are properly focused and aligned with business goals and priorities; formulating and executing business-driven technology directions and strategies; providing overall management, assessment, and prioritization of research and standards activities; and keeping the Citibank highly innovative. Areas of focus include electronic banking, payments and electronic commerce, bill presentment and payment, portfolio and risk management, financial engineering and new product design, customer behavioral modeling, mathematical marketing analyses and simulations, fraud detection and control, security over computer networks. Advanced technologies under investigation include agent technology, XML, machine learning, multimedia, biometrics, image and voice processing, smart cards and secure tokens.

Previous positions include Technical Director Naval Intelligence, Technical Director Navy Command, Control and Communications, and Program Manager Sperry Rand. Also worked for Bell Labs, Syracuse University and IBM.

Currently serving as Research Professor of Information Technology at Rutgers Center of Management, Integration and Connectivity (CIMIC), and teaching part time at Iona College in New Rochelle, New York, and George Washington University in Washington D.C.

EDUCATIONAL BACKGROUND: BSEE, College of City of New York, MSEE and Ph.D. Syracuse University

PUBLICATIONS: Authored over 65 publications and 7 books: Parallel and Distributed Processing, Application of Emerging Technologies in Business, Applied Artificial Intelligence, Military Communications, Command and Control, a chapter on Financial Risk Management in a Financial Management Handbook, and a Chapter in a Book on Electronic Commerce.

019051