We will be at Colorado's tabletop exercise that day, but we can make 12:30 ET work.

On Fri, Jan 17, 2020 at 5:28 PM Kay Stimson <kay.stimson@ (b) (6) ████████ wrote:

> Thanks, our team is asking if we can schedule for Wednesday at 11:30 AM ET? Would that work?
>
> Kay
>
>
> **From:** Jerome Lovato <jlovato@eac.gov>
> **Sent:** Friday, January 17, 2020 4:24 PM
> **To:** Kay Stimson <kay.stimson@ (b) (6) ████████
> **Cc:** Jessica Bowers (b) (6) ████████ ; Paul Aumayr (b) (6) ████████ ; Mona Harrington < mharrington@eac.gov>
> **Subject:** Re: [EXTERNAL] Memo - Windows Critical Update
>
>
> Hi Kay,
>
>
> Does Tuesday at 11:00 a.m. ET work for you? We have not made the memo public.
>
>
> Jerome
>
>
> On Fri, Jan 17, 2020 at 4:17 PM Kay Stimson <kay.stimson@ (b) (6) ████████ wrote:
>
>> Thanks, Jerome. We have a lot of questions – can we set up a call for Tuesday late morning/early afternoon? Also, is the memo public? Wondering about media.
>>
>> Thanks,
>> Kay

From: Jerome Lovato <jlovato@eac.gov>
Sent: Friday, January 17, 2020 2:56 PM
Cc: Jessica Bowers (b) (6) ; Paul Aumayr (b) (6) Mona Harrington < mharrington@eac.gov>
Subject: [EXTERNAL] Memo - Windows Critical Update

Hi All,

I have attached a memo regarding the Windows critical update. Please let me know if you have any questions.

Thank you,

Jerome Lovato

Director, Voting System Testing and Certification

U.S. Election Assistance Commission

Ph. 202-805-4613

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Wednesday, January 22, 2020 3:45:10 PM
To: Kay Stimson<kay.stimson@ **(b) (6)**
Subject: Re: [EXTERNAL] Re: Memo - Windows Critical Update

No problem. I'll send it in a separate email. I don't know when he plans on sending it - he mentioned that he'd like to send it this week.

On Wed, Jan 22, 2020 at 7:16 AM Kay Stimson <kay.stimson@ **(b) (6)** wrote:

Thanks for the heads up, Jerome. I totally dropped the ball on our proposed call for 12:30 PM ET today. Can you send me a call number? Thanks!

Also, what day are you sending out the notice?

Kay

KAY STIMSON | VP, GOVERNMENT AFFAIRS

DOMINION VOTING SYSTEMS

866-654-VOTE (8683)| DOMINIONVOTING.COM

(b) (6) MOBILE/DIRECT

From: Jerome Lovato <jlovato@eac.gov>
Sent: Wednesday, January 22, 2020 12:21 AM
Cc: Jessica Bowers **(b) (6)** ; Paul Aumayr **(b) (6)** ; Mona Harrington < mharrington@eac.gov>
Subject: [EXTERNAL] Re: Memo - Windows Critical Update

FYI. Commissioner Palmer plans on sharing the memo with NASS and NASEDthis week. I wanted to give you a heads up since you may receive additional inquiries from your customers and press.

Jerome

On Fri, Jan 17, 2020 at 2:56 PM Jerome Lovato <jlovato@eac.gov> wrote:

Hi All,

I have attached a memo regarding the Windows critical update. Please let me know if you have any questions.

Thank you,

Jerome Lovato

Director, Voting System Testing and Certification

U.S. Election Assistance Commission

Ph. 202-805-4613

--
Jerome Lovato
Director, Voting System Testing and Certification
U.S. Election Assistance Commission
Ph. 202-805-4613

From: EAC Schedules<eac.gov_ea30m4gnr09t7u2j1mehgjscss@group.calendar.google.com>

Sent on: Wednesday, January 22, 2020 3:48:21 PM

To: kay.stimson@(b) (6) jbowers(b) (6) mharrington@eac.gov; kmuthig(b) (6) paumayr(b) (6)

Subject: Invitation: Call with Dominion @ Wed Jan 22, 2020 12pm - 12:30pm (EST) (mharrington@eac.gov)

Attachments: invite.ics (2.39 KB)

You have been invited to the following event.

Call with Dominion

When	Wed Jan 22, 2020 12pm – 12:30pm Eastern Time - New York
Calendar	mharrington@eac.gov

Who
- jlovato@eac.gov - creator
- kay.stimson@(b) (6)
- jbowers(b) (6)
- mharrington@eac.gov
- kmuthig(b) (6)
- paumayr(b) (6)

more details »
Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (mharrington@eac.gov)?
Yes -
Maybe -
No **more options »**

EAC-0116

From: Jessica Bowers<jbowers █(b) (6)█

Sent on: Monday, January 27, 2020 9:03:36 PM

To: Jonathon Panek<jpanek@█(b) (6)█ Traci Mapps (tmapps@█(b) (6)█ Traci Mapps (tmapps@█(b) (6)█ Pamela Geppert<pgeppert@█(b) (6)█ Jared Bernal<jbernal@█(b) (6)█ Jerome Lovato (jlovato@eac.gov)<Jerome Lovato (jlovato@eac.gov)>; Paul Aumayr █(b) (6)█)<Paul Aumayr █(b) (6)█

CC: pgeppert@█(b) (6)█ (Google Calendar)<pgeppert@█(b) (6)█ (Google Calendar)>

Subject: Verity 2.4 AutoBallot and accessibility peripherals discussion

Update: The timing didn't work for everyone so we've rescheduled for 9:30am MST on Wednesday. Please suggest an alternate date/time if this doesn't work for you.

Hi all,

We had a brief conversation today with SLI regarding the AutoBallot barcode scanner based on the ECO that was submitted to us last week. After the call, we looked into the HW testing reports further and discovered that the barcode scanner and some accessibility peripherals were also included in the testing (jelly switches, headphones) so we will also need these listed in the report.

Since the barcode scanner was included in the hardware testing, it will most likely need to be in the test report as a part of the certified configuration or the HW testing will need to be redone without it.

Jessica

Jessica Bowers is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

https://zoom.us/j/873542978?pwd=R1NKTGpmMWN6SEN3T0Y3S3dqanlaUT09

Meeting ID: 873 542 978

Password: 763741

One tap mobile

+16699006833,,873542978# US (San Jose)

+19292056099,,873542978# US (New York)

Dial by your location

+1 669 900 6833 US (San Jose)

+1 929 205 6099 US (New York)

877 853 5247 US Toll-free

888 788 0099 US Toll-free

Meeting ID: 873 542 978

Find your local number: https://zoom.us/u/aevkYyoVaG

Hi there,

Ian Piper is inviting you to a

scheduled Zoom meeting.

Join Zoom

Meeting

US: +16699006833,,823213413# or +16699006833,,823213413#

Meeting URL: https://dominionvoting.zoom.us/j/823213413

Meeting ID: 823 213 413

Join by Telephone

For higher quality, dial a number

based on your current location.

US: +1 929 436 2866 or +1 669 900 6833 or 877 853 5247 (Toll Free)

or 877 369 0926 (Toll Free)

Canada: +1 647 558 0588 or 855 703 8985 (Toll Free)

Serbia: 0 800 500 702 (Toll Free)

Meeting ID: 823 213 413

International numbers

From: McKay, Sue<slmckay@ ██(b) (6)██

Sent on: Wednesday, February 12, 2020 5:44:34 PM

To: Jerome Lovato<jlovato@eac.gov>

Subject: RE: Request Call

So sorry to hear that. No worries. Just needed to know if the EAC is requesting us to do an ECO or were you accepting a write up from Pro V&V.

From: Jerome Lovato <jlovato@eac.gov>
Sent: Wednesday, February 12, 2020 11:42 AM
To: McKay, Sue <slmckay@ ██(b) (6)██
Subject: Re: Request Call

Sorry, Sue. I had to take my mom to see a doctor and thought we'd be out by now. She needs me to be present so I will call as soon as we're done.

On Wed, Feb 12, 2020 at 12:06 PM McKay, Sue <slmckay@ ██(b) (6)██ wrote:

> Jerome,
> Would you please give me a call? We need to respond to the State of PA.
> Thank you
> Sue
> **From:** Jerome Lovato <jlovato@eac.gov>
> **Sent:** Wednesday, February 12, 2020 9:17 AM
> **To:** McKay, Sue <slmckay@ ██(b) (6)██
> **Subject:** Re: Request Call
> Good morning Sue,
> I'll give you a call in about an hour.
> Thank you,
> Jerome
> On Wed, Feb 12, 2020 at 10:04 AM McKay, Sue <slmckay@ ██(b) (6)██ wrote:
>
>> Morning Jerome,
>> Would you be able to give me a quick call regarding the FPGA testing Pro V&V did yesterday? My number is ██(b)██
>> ██(b) (6)██
>> Thank you
>> **Sue L McKay**
>> Vice President of Federal Certification
>> Election Systems and Software
>> ██(b) (6)██
>>
>> **Disclaimer**
>>

--
Jerome Lovato
Director, Voting System Testing and Certification
U.S. Election Assistance Commission
Ph. 202-805-4613

Confidential Notice: This message may contain Controlled Unclassified Information (CUI) that requires safeguarding or dissemination control under applicable law, regulation, or Government-wide policy. This email, including all attachments, may constitute a Federal record or other Government property that is

--

Jerome Lovato
Director, Voting System Testing and Certification
U.S. Election Assistance Commission
Ph. 202-805-4613

From: Matt Pasternack<matt@(b) (6)████████>
Sent on: Monday, March 9, 2020 5:18:33 AM
To: Ben Adida<ben@(b) (6)████████>
CC: Benjamin Hovland<bhovland@eac.gov>
Subject: Re: Monday Starkville Meeting

I made a reservation at Harvey's in Starkville for 12:30. 406 Hwy 12 E, Starkville. I'm sure we can adjust a bit later though if we need to.

Looking forward to it,

Matt

On Sat, Mar 7, 2020 at 10:37 AM Ben Adida <ben@(b) (6)████████> wrote:

> Looking forward to seeing you and chatting!
>
> On Sat, Mar 7, 2020, 4:27 AM Benjamin Hovland <bhovland@eac.gov> wrote:
>
>> That sounds great. I am looking forward to it.
>>
>> Thanks,
>>
>> Ben
>>
>> **From:** Matt Pasternack <matt@(b) (6)████████>
>> **Sent:** Friday, March 6, 2020 11:34 PM
>> **To:** Benjamin Hovland <Bhovland@eac.gov>; Ben Adida <ben@(b) (6)████████>
>> **Subject:** Monday Starkville Meeting
>>
>> Ben, Ben A (cc'd) and I can't wait to sit down together with you Mon afternoon. Since you're arriving noonish in Starkville, what if we plan to meet for lunch? If that sounds good, I'll send a restaurant to meet at, and then we can adjust Mon morning depending on how quick your trip from Tuscaloosa ends up being.
>>
>> Have a great weekend and looking forward to meeting in person on Mon,
>>
>> Matt
>>
>> --
>>
>> Matt Pasternack
>>
>> (b) (6) ████████

--

Matt Pasternack
(b) (6)
https://voting.works

From: <jlovato@eac.gov>
Sent on: Monday, March 16, 2020 3:30:47 AM
To: McDermot Coutts (b) (6)   Bernie Hirsch (b) (6)   ;
Gwenyth Winship (b) (6)   Pearson,
Steve< (b) (6)   ; Russ Dawson (b) (6)
kmuthig((b) (6)   jbowers (b) (6)   paumay (b) (6)   mharrington@eac.gov;
nwilliams((b) (6)   McKay, Sue (b) (6)   ; Chris
Ortiz< (b) (6)   >; Rogers, Kathy< (b) (6)   ; Pamela
Gepper (b) (6)   ; Edwin Smith (b) (6)   ; Kay
Stimsor (b) (6)   ; Ian Piper (b) (6)
Subject: Invitation: CDC Guidance for Cleaning Voting Equipment @ Mon Mar 16, 2020 3pm - 4pm
(EDT) (mharrington@eac.gov)
Attachments: invite.ics (4.36 KB)

> **You have been invited to the following event.**

CDC Guidance for Cleaning Voting Equipment

When	Mon Mar 16, 2020 3pm – 4pm Eastern Time - New York
Where	https://zoom.us/j/949237329?pwd=UTVXV0tjcHFkMENPb3dYRUEzNjkydz09 (map)
Calendar	mharrington@eac.gov
Who	

- jlovato@eac.gov
  - organizer
- McDermot Coutts
- Bernie Hirsch
- Gwenyth Winship
- Pearson, Steve
- Russ Dawson
- kmuthig (b) (6)
- jbowers (b) (6)
- paumay (b) (6)
- mharrington@eac.gov
- nwilliams (b) (6)
- McKay, Sue
- Chris Ortiz
- Rogers, Kathy
- Pamela Geppert
- Edwin Smith
- Kay Stimson
- Ian Piper

more details »
Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (mharrington@eac.gov)?
Yes -
Maybe -
Nomore options »

EAC-0125

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Tuesday, March 17, 2020 2:57:16 PM
To: Russ Dawson (b) (6)
CC: Paul Aumayr<paumay(b) (6); Jessica Bowers<jbowers(b) (6); Brandon Bell(b) (6) Gwenyth Winship(b) (6)
Subject: Re: Commonwealth of PA mail-in ballots dynamics

I've never experienced a postponed election - not even a local election. Glad you all are providing the best support possible!

Thursday at 1 works for me.

On Tue, Mar 17, 2020 at 10:52 AM Russ Dawson (b) (6) wrote:

> Thank you Jerome.
>
> Writing from OH this morning. My mission was to provide support for a CBG customer in the eastern part of the state. Boy oh boy was yesterday a rollercoaster. First time in my 30 years in this space that an election has been postponed.
>
> I propose Thursday, 3/19@ 1 PM EDT for our discussion. Please confirm and we'll proceed from there.
>
> Thanks in advance for agreeing to this accelerated request for adiscussion.
>
> - rpd
>
> Russ Dawson
> Federal Certification Program Manager
> (b) (6)
>
> www.clearballot.com
>
>
> On Mon, Mar 16, 2020 at 4:32 PM Jerome Lovato <jlovato@eac.gov> wrote:
>
>> Hi Russ,
>>
>> Thank you for your input duringthe call.
>>
>> We are available the following times this week:
>> Thursday: 11:00 - 2:00 ET
>> Friday: 11:00 - 3:00 ET
>>
>> Thank you,
>> Jerome
>>
>>
>> On Mon, Mar 16, 2020 at 4:10 PM Russ Dawson (b) (6) wrote:
>>
>>> Hello Jerome.
>>>
>>> Really appreciate the manner in which you lead today's CDC/corona virusteleconference. Collaborative and very solution-oriented. Thank you.
>>>
>>> The purpose of this email message is to raise awareness of a quickly evolving issue regarding the sudden and likely dramatic rise of voters choosing to cast mail-in ballots in Pennsylvania. Combining

the potential health risks posed to older voters casting ballots at the polls, new statutes enabling no excusesabsenteevoting, and the ever-evolving threat dynamics of the spread of the virus, election officials throughout the Commonwealth anticipate processing unprecedented amounts of mail-in ballots for the 4/28 primary election.

In that light, I'd like to have a brief discussion with you regarding pending ClearVote scanner ECO processes now in motion. Currently these ECOs are resident at CBG's VSTL undergoing mandated examination and certification processes. Once that process is complete, we'llltake next steps with the EAC.

Can you please suggest a few times Thursday or Friday of this week when we might speak about this? Let me know. Likely need no more than 15-20 minutes, perhaps fewer.

Thanks much in advance Jerome.

- rpd

Russ Dawson
Federal Certification Program Manager
(b) (6)
www.clearballot.com

From: <jlovato@eac.gov>
Sent on: Wednesday, March 18, 2020 3:50:25 PM
To: gwenyth.winship(b) (6)   jbowers(b) (6)   paumayr(b) (6)
russ.dawson@(b) (6)
Subject: Invitation: Clear Ballot ECO discussion @ Thu Mar 19, 2020 1pm - 2pm (EDT)
(paumayr(b) (6)
Attachments: invite.ics (2.51 KB)

You have been invited to the following event.

Clear Ballot ECO discussion

When   Thu Mar 19, 2020 1pm – 2pm Eastern Time - New York

Where   https://zoom.us/j/624168427?pwd=emRKQmZVajlJM29zc0dacGFkZjlqUT09 (map)

Calendar   paumayr(b) (6)

Who
- jlovato@eac.gov
  - organizer
- gwenyth.winship(b) (6)
- jbowers(b) (6)
- paumayr(b) (6)
- russ.dawson(b) (6)

more details »
Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (paumay (b) (6)
Yes -
Maybe -
No **more options »**

Invitation from Google Calendar

From: Hunter Medlock ████████████████████████████
Sent on: Monday, March 23, 2020 7:34:13 PM
To: Paul Aumayr ████████████ Ian Piper ████████████████████ Wendy Owens ████████
Subject: RE: DVS Democracy Suite 5.5-C

That will be fine on our end. Thanks
Hunter Medlock
Project Engineer
Pro V&V
████████████████

From: Paul Aumayr ████████
Sent: Monday, March 23, 2020 2:33 PM
To: Ian Piper ████████████████ Wendy Owens ████████████████; Hunter Medlock ████████
Subject: DVS Democracy Suite 5.5-C
Goodafternoon and hopeyou're all staying healthy.
Given that the Democracy Suite 5.5-C application has been approved, I was looking to have a usual weekly quick phone call to keep up on progress. I was looking at Thursdays at 11.00 ET, if that would be agreeable to all.
Let me know what you think.
Thanks!
Paul
--
Paul Aumayr
Senior Election Technology Specialist
U.S. Election Assistance Commission
████████████

From: Matt Pasternack (b) (6)
Sent on: Thursday, March 26, 2020 6:54:41 PM
To: Jerome Lovato<jlovato@eac.gov>
Subject: Re: Introductions: Jerome (EAC) <-> Matt (VotingWorks)

No problem, sent invite. Thanks for making the time.

Matt

On Thu, Mar 26, 2020 at 11:43 AM Jerome Lovato <jlovato@eac.gov> wrote:
> Sorry I missed your call. Let's talk at 2 ET tomorrow.
>
>
> On Thu, Mar 26, 2020 at 2:17 PM Matt Pasternack (b) (6) wrote:
>> Jerome, great to connect. Twilight zone+ Groundhog Day is a good analogy. Ben thanks for the intro (to bcc).
>>
>> Any chance tomorrow at 11:30am ET, 2pm ET, or 4pm ET works for you? If not, no problem and I'll send over some more possibilities for next week.
>>
>> Looking forward to talking,
>>
>> Matt
>>
>> On Thu, Mar 26, 2020 at 6:44 AM Jerome Lovato <jlovato@eac.gov> wrote:
>>> Thank you, Ben. All is well here...other than it feeling like a strange mix of the Twilight Zone and Groundhog Day. :) I hope all is well with you and your family. It is an exciting time here for sure!
>>>
>>> Hi Matt, nice to meet you. I'd be glad to set up a meeting to walk through the process and answer any questions. Here is a link to our manuals and forms:https://www.eac.gov/voting-equipment/manuals-and-forms. Section 2 of the Testing and Certification Program Manual describes the registration process. I just submitted an updated Manufacturer Registration Form to our webmasterlast night so that should be online later today.
>>>
>>> Jerome
>>>
>>> Jerome Lovato
>>> Director, Voting System Testing and Certification
>>> U.S. Election Assistance Commission
>>> Ph. 202-805-4613
>>>
>>>
>>> On Thu, Mar 26, 2020 at 1:11 AM Ben Adida (b) (6) wrote:
>>>> Jerome,
>>>>
>>>> I hope you and your familyare staying safe and staying sane in these incredibly challenging times. I also see that the EAC team is growing with the addition of some great folks -- that must be exciting!
>>>>
>>>> I wanted to introduce you to Matt Pasternack, cc'ed, co-founder at VotingWorks, who's going to be leading the charge on the certification process. Yes, we are interested in registering as a vendor with EAC and beginning the process of certification!

-Ben

--
Matt Pasternack
(b) (6)

https://voting.works

--
Matt Pasternack
(b) (6)

https://voting.works

From: <matt@(b) (6)

Sent on: Thursday, March 26, 2020 6:54:06 PM

To: jlovato@eac.gov

Subject: Invitation: Jerome - Matt @ Fri Mar 27, 2020 2pm - 3pm (EDT) (jlovato@eac.gov)

Attachments: invite.ics (1.47 KB)

You have been invited to the following event.

Jerome - Matt

When	Fri Mar 27, 2020 2pm – 3pm Eastern Time - New York
Joining info	Join Hangouts Meet
	meet.google.com/frz-tmma-gdw
	Join by phone
	+1 614-948-6524 (PIN: 370000911)
	More phone numbers
Calendar	jlovato@eac.gov
Who	

- matt@(b) (6)
  - organizer
- jlovato@eac.gov

more details »

Going (jlovato@eac.gov)?
Yes -
Maybe -
Nomore options »

From: Mona Harrington<mharrington@eac.gov> on behalf of Mona Harrington
Sent on: Monday, November 2, 2020 5:32:30 PM
To: kay.stimson@(b) (6)
Subject: Re: Questions for ED

Yes! I will call you today. Sorry- craziness.

Btw- I get your concerns! Call me

> On Nov 2, 2020, at 11:34 AM, Kay Stimson (b) (6) wrote:

Hi, Mona.
I left you a voicemail last week and wanted to try and connect prior to tomorrow. Are you available to chat sometime today?
Kay
KAY STIMSON|VP, GOVERNMENT AFFAIRS
DOMINION VOTING SYSTEMS
866-654-VOTE (8683)| DOMINIONVOTING.COM

From: Rogers, Kathy (b) (6) █████████████████

Sent on: Friday, March 27, 2020 2:09:29 PM

To: Hallett, Tim(b) (6) ███████████████ Jerome Lovato<jlovato@eac.gov>

Subject: RE: EAC Public Hearing

Jerome –

I just tried to join and it says that the 100 max capacity has been reached?

From: Jerome Lovato <jlovato@eac.gov>

Sent: Friday, March 27, 2020 8:58 AM

To: Hallett, Tim (b) (6) ███████████

Subject: Re: EAC Public Hearing

No problem! Here it is:

Description:

https://zoom.us/j/516385751

Meeting ID: 516 385 751

One tap mobile

+19292056099,,516385751# US (New York)

+13126266799,,516385751# US (Chicago)

Dial by your location

+1 929 205 6099 US (New York)

+1 312 626 6799 US (Chicago)

+1 301 715 8592 US

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 253 215 8782 US

888 788 0099 US Toll-free

877 853 5247 US Toll-free

Meeting ID: 516 385 751

Jerome Lovato

Director, Voting System Testing and Certification

U.S. Election Assistance Commission

Ph. 202-805-4613

On Fri, Mar 27, 2020 at 9:57 AM Hallett, Tim (b) (6) ███████████████ wrote:

> Mr. Lovato,
> Please send me the information for the EAC Public Hearing regarding the VVSG Guidelines. I apologize for calling you directly. Thank you.
> Timothy J. Hallett
> Associate General Counsel
> Election Systems & Software, LLC
> 11208 John Galt Boulevard
> Omaha, Nebraska 68137
> (b) (6)
> ████████████████
>
> CONFIDENTIALITY NOTICE:
> This e- mail transmission and any documents, files or previous e- mail messages attached to it may contain information that is confidential, protected by the attorney/client or other privileges, and may constitute non-public information. It is intended to be conveyed only to the designated recipient(s) named above. Any unauthorized use, reproduction, forwarding, distribution or other dissemination of this transmission is strictly prohibited and may be unlawful. If you are not an intended recipient of this e- mail transmission, please notify the sender by return e- mail and permanently delete any record of this transmission. Your cooperation is appreciated.

Disclaimer

From:	Jerome Lovato<jlovato@eac.gov>
Sent on:	Friday, March 27, 2020 7:04:05 PM
To:	Matt Pasternack (b) (6)
Subject:	updated manufacturer registration form
Attachments:	Manufacturer_Registration_Application.EAC_001C(1).pdf (2.78 MB), Voting System Certification Requirements by State - 2018.xlsx (11.83 KB)

Hi Matt,

It was nice chatting today. I have attached the updated manufacturer registration form and the spreadsheet of the various requirements - Category 4 states require federal certification (most refer to EAC but at least one refers to FEC).

Jerome

From: Google Calendar<calendar-notification@google.com> on behalf of paumayr ██(b) (6)██
Sent on: Thursday, April 9, 2020 2:04:20 PM
To: hunter.medlock██(b) (6)██ paumayr██(b) (6)██ ian.piper@██(b) (6)██
Subject: Democracy Suite 5.5-C Call

As requested by Ian

Democracy Suite 5.5-C Call UPDATED

When   Thu Apr 9, 2020 11am – 11:30am Eastern Time - New York

Where   https://zoom.us/j/6421650433?pwd=UDI5MzA5dzQvZCtaMUV0UmhBNndGUT09 ([map](#))

Who
- paumayr██(b) (6)██
  - organizer
- hunter.medlock██(b) (6)██
- ian.piper@██(b) (6)██
- wendy.owens██(b) (6)██

Paul Aumayr is inviting you to a scheduled Zoom meeting.

You have been invited to the following event.

DS200 Discussion with ES&S

When	Fri Apr 10, 2020 2pm – 3pm Eastern Time - New York
Where	https://zoom.us/j/729391086?pwd=NThsL2V6RmM4UmV3WVlEN3JWSHdXQT09 (map)
Calendar	paumayr ■(b) (6)
Who	

- jlovato@eac.gov
  - organizer
- ajoiner ■(b) (6)
- smpearson@■(b) (6)
- zshaw ■(b) (6)
- paumayr ■(b) (6)
- kathy.rogers@■(b) (6)

more details »
Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (paumayr ■(b) (6))
Yes -
Maybe -
No more options »

Invitation from Google Calendar

Invitation from Google Calendar

You are receiving this email at the account paumay (b) (6) because you are subscribed for invitations on calendar paumay (b) (6)

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: McKay, Sue<(b) (6)

Sent on: Thursday, April 16, 2020 5:01:15 PM

To: Jerome Lovato<jlovato@eac.gov>; Paul Aumayr<(b) (6) ; Michael Walker(b) (6) Pearson, Steve(b) (6)

Subject: Touch Base Call

Call for 4:30 EST and 3:30 CST.

From: Ian Piper<ian.piper(b) (6)

Sent on: Wednesday, April 29, 2020 11:09:31 PM

To: paumayr(b) (6)

Subject: Accepted: [EXTERNAL]Updated invitation: Democracy Suite 5.5-C Call UPDATED @ Thu Apr 30, 2020 3pm - 3:30pm (EDT) (ian.piper@(b) (6)

From: tjhallett@(b) (6) ▓▓ (Google Calendar)<tjhallett@(b) (6) ▓▓ (Google Calendar)>
Sent on: Tuesday, May 5, 2020 6:12:33 PM
To: mharrington@eac.gov
Subject: Accepted: EAC/Vendor Meeting @ Tue May 12, 2020 1pm - 1:45pm (EDT) (mharrington@eac.gov)
Attachments: not supported calendar message.ics (1.05 KB), invite.ics (1.05 KB)

---

tjhallett@(b) (6) ▓▓
has accepted this invitation.

EAC/Vendor Meeting

When	Tue May 12, 2020 1pm – 1:45pm Eastern Time - New York
Where	1-866-823-7147,,82557085# (map)
Calendar	mharrington@eac.gov
Who	

- mharrington@eac.gov
  - organizer
- 'Clear Ballot Group:'
- 'COrtiz(b) (6) ▓▓
- Jerome (jlovato@eac.gov)
- 'Rogers, Kathy'
- 'Smartmatic:'
- 'kay.stimson@(b) (6) ▓▓
- 'Hart Intercivic:'
- 'bhirsch(b) (6) ▓▓
- Jessica Bowers
- Bernie Hirsch
  - optional
- Hallett, Tim
  - optional

Call in information:

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: pgeppert@(b) (6) (Google Calendar)<pgeppert@(b) (6) (Google Calendar)>
Sent on: Friday, May 8, 2020 9:03:01 PM
To: mharrington@eac.gov
Subject: Accepted: EAC/Vendor Meeting @ Tue May 12, 2020 1pm - 1:45pm (EDT) (mharrington@eac.gov)
Attachments: not supported calendar message.ics (1.05 KB), invite.ics (1.05 KB)

---

pgeppert@(b) (6)
has accepted this invitation.

EAC/Vendor Meeting

When   Tue May 12, 2020 1pm – 1:45pm Eastern Time - New York

Where   1-866-823-7147,,82557085# (map)

Calendar   mharrington@eac.gov

Who
- mharrington@eac.gov
  - organizer
- 'Clear Ballot Group:'
- 'COrtiz(b) (6)
- Jerome (jlovato@eac.gov)
- 'Rogers, Kathy'
- 'Smartmatic:'
- 'kay.stimson@(b) (6)
- 'Hart Intercivic:'
- 'bhirsch(b) (6)
- Jessica Bowers
- Bernie Hirsch
  - optional
- Hallett, Tim
  - optional
- tjhallett@(b) (6) (Google Calendar)
  - optional
- Pearson, Steve
  - optional
- Pamela Geppert
  - optional

Call in information:

From: <jlovato@eac.gov>
Sent on: Wednesday, May 6, 2020 8:56:48 PM
To: matt@ **(b) (6)** paumay **(b) (6)** ; zshaw **(b) (6)** oletts **(b) (6)**
Subject: Invitation: Meeting with VotingWorks to discuss VVSG 1.1 @ Tue May 12, 2020 4pm - 5pm (EDT) (zshaw **(b) (6)**
Attachments: invite.ics (2.52 KB)

> **You have been invited to the following event.**

Meeting with VotingWorks to discuss VVSG 1.1

When	Tue May 12, 2020 4pm – 5pm Eastern Time - New York
Where	https://us02web.zoom.us/j/83413066960?pwd=OHZBK3o0di9kaU5uRWs0M1oyaEE2dz09 (map)
Calendar	zshaw **(b) (6)**
Who	• jlovato@eac.gov - organizer • matt@ **(b) (6)** • paumay **(b) (6)** • zshaw **(b) (6)** • oletts **(b) (6)**

more details »

Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (zshaw **(b) (6)**

Yes -
Maybe -
No more options »

Invitation from **Google Calendar**

You are receiving this email at the account zshaw **(b) (6)** because you are subscribed for invitations on calendar zshaw **(b) (6)**

EAC-0147

From:	mcoutts(b) (6)████████ (Google Calendar)<mcoutts(b) (6)████████ (Google Calendar)>
Sent on:	Thursday, May 14, 2020 12:16:25 AM
To:	jlovato@eac.gov
Subject:	Accepted: VVSG 2.0 Requirements Pre-Hearing Discussion @ Fri May 15, 2020 1pm - 2pm (EDT) (jlovato@eac.gov)

Attachments: not supported calendar message.ics (1.45 KB), invite.ics (1.45 KB)

---

mcoutts(b) (6)████████
has accepted this invitation.

VVSG 2.0 Requirements Pre-Hearing Discussion

When	Fri May 15, 2020 1pm – 2pm Eastern Time - New York
Where	https://us02web.zoom.us/j/82983109606?pwd=QlBLeGV2ckloSDE2Ty9HZUFoNnVjZz09 (map)
Calendar	jlovato@eac.gov

Who

- jlovato@eac.gov
  - organizer
- mcoutts(b) (6)████
- kathy.rogers@(b) (6)████
- rroberson(b) (6)███
- kmuthig(b) (6)███
- bhirsch(b) (6)████
- ben@(b) (6)███
- tmapps@(b) (6)████
- smpearson@(b) (6)████
- edwin.smith(b) (6)████
- ian.piper@(b) (6)████
- kay.stimson@(b) (6)████
- sderheimer@(b) (6)███
- mharrington@eac.gov
- jack.cobb(b) (6)███
- jcanter@(b) (6)███
- russ.dawson(b) (6)████

Jerome Lovato is inviting you to a scheduled Zoom meeting.

From: Ian Piper<ian.piper@(b) (6)

Sent on: Monday, May 11, 2020 2:16:46 PM

To: paumayr(b) (6)

Subject: Accepted: [EXTERNAL] Invitation: Dominion D-Suite 5.5-C @ Weekly from 11am to 11:30am on Thursday from Thu May 14 to Thu Jul 16 (EDT) (ian.piper@(b) (6)

From:	Google Calendar<calendar-notification@google.com> on behalf of ben@(b) (6)
Sent on:	Thursday, May 14, 2020 12:30:06 AM
To:	jlovato@eac.gov
Subject:	Accepted: VVSG 2.0 Requirements Pre-Hearing Discussion @ Fri May 15, 2020 1pm - 2pm (EDT) (jlovato@eac.gov)

Attachments: invite.ics (1.43 KB)

---

ben@(b) (6)
has accepted this invitation.

VVSG 2.0 Requirements Pre-Hearing Discussion

When	Fri May 15, 2020 1pm – 2pm Eastern Time - New York
Where	https://us02web.zoom.us/j/82983109606?pwd=QlBLeGV2ckloSDE2Ty9HZUFoNnVjZz09 ([map])
Calendar	jlovato@eac.gov
Who	

- jlovato@eac.gov
  - organizer
- mcoutts(b) (6)
- kathy.rogers@(b) (6)
- rroberson(b) (6)
- kmuthig(b) (6)
- bhirsch(b) (6)
- ben@(b) (6)
- tmapps@(b) (6)
- smpearson@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- mharrington@eac.gov
- jack.cobb(b) (6)
- jcanter@(b) (6)
- russ.dawson(b) (6)

Jerome Lovato is inviting you to a scheduled Zoom meeting.

EAC-0153

From: <jlovato@eac.gov>

Sent on: Wednesday, May 13, 2020 11:35:01 PM

To: mcoutts(b) (6) ; rroberson(b) (6) ; kmuthig(b) (6) bhirsch(b) (6) ben@(b) (6) smpearson@(b) (6) mharrington@eac.gov; jack.cobb(b) (6) russ.dawson(b) (6) ; kathy.rogers@(b) (6) tmapps@(b) (6) edwin.smith(b) (6) ; ian.piper@(b) (6) kay.stimson@(b) (6) sderheimer@(b) (6) jcanter@(b) (6)

Subject: Invitation: VVSG 2.0 Requirements Pre-Hearing Discussion @ Fri May 15, 2020 1pm - 2pm (EDT) (kmuthig(b) (6)

Attachments: invite.ics (4.42 KB)

You have been invited to the following event.

VVSG 2.0 Requirements Pre-Hearing Discussion

When	Fri May 15, 2020 1pm – 2pm Eastern Time - New York
Where	https://us02web.zoom.us/j/82983109606?pwd=QlBLeGV2ckloSDE2Ty9HZUFoNnVjZz09 (map)
Calendar	kmuthig@eac.gov

Who
- jlovato@eac.gov
  - organizer
- mcoutts(b) (6)
- rroberson(b) (6)
- kmuthig(b) (6)
- bhirsch(b) (6)
- ben@(b) (6)
- smpearson@(b) (6)
- mharrington@eac.gov
- jack.cobb(b) (6)
- russ.dawson(b) (6)
- kathy.rogers@(b) (6)
- tmapps@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- jcanter@(b) (6)

more details »

Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (kmuthig █(b) (6)█

Yes -
Maybe -
Nomore options »

From: Ben Adida<ben@(b) (6)█████████

Sent on: Monday, May 18, 2020 5:55:08 PM

To: Jerome Lovato<jlovato@eac.gov>

Subject: Re: quick phone chat today?

I'll call you then, 4pm pacific!

-ben

On Mon, May 18, 2020 at 10:53 AM Jerome Lovato <jlovato@eac.gov> wrote:
> Perfect. My work cell is (b) (6)█████████
>
> On Mon, May 18, 2020 at 1:52 PM Ben Adida <ben@(b) (6)█████ wrote:
>
>> Excellent, what's the right number to call you at? Or if you prefer, you can call me at (b) (6)█████████
>>
>> -Ben
>
>> On Mon, May 18, 2020 at 10:46 AM Jerome Lovato <jlovato@eac.gov> wrote:
>>> Yes.
>>>
>>> On Mon, May 18, 2020 at 1:44 PM Ben Adida <ben@(b) (6)█████ wrote:
>>>
>>>> That works. Is phone best?
>>>>
>>>> -Ben
>>>
>>>> On Mon, May 18, 2020 at 10:36 AM Jerome Lovato <jlovato@eac.gov> wrote:
>>>>> Sure. How about at 4 PT?
>>>>>
>>>>> On Mon, May 18, 2020 at 1:33 PM Ben Adida <ben@(b) (6)█████ wrote:
>>>>>> Jerome,
>>>>>>
>>>>>> Do you have time for a quick phone or zoom chat today? I'd love to get your thoughts on something before Wednesday's hearing.
>>>>>>
>>>>>> -Ben

Topic: VVSG 2.0 Requirements Hearing 3
Time: May 20, 2020 01:30 PM Eastern Time (US and Canada)

Join Zoom Meeting

https://us02web.zoom.us/j/85620834404

Meeting ID: 856 2083 4404

Password: 857347

One tap mobile

+13017158592,,85620834404# US (Germantown)

+13126266799,,85620834404# US (Chicago)

Dial by your location

    +1 301 715 8592 US (Germantown)

    +1 312 626 6799 US (Chicago)

    +1 929 205 6099 US (New York)

    +1 346 248 7799 US (Houston)

    +1 669 900 6833 US (San Jose)

    +1 253 215 8782 US (Tacoma)

    877 853 5247 US Toll-free

    888 788 0099 US Toll-free

Meeting ID: 856 2083 4404

Find your local number:https://us02web.zoom.us/u/kq5dKCgiW

From: smpearson@(b) (6) ████ (Google Calendar)<smpearson@(b) (6) ████ (Google Calendar)>

Sent on: Wednesday, May 20, 2020 9:13:30 PM

To: paumayr(b) (6) ████

Subject: Accepted: ES&S EVS 6.0.3.0 and 6.1.1.0 @ Fri Jun 12, 2020 11am - 11:30am (EDT) (paumayr(b) (6) ████

Attachments: not supported calendar message.ics (2.4 KB), invite.ics (2.4 KB)

**smpearson@(b) (6) ████
has accepted this invitation.**

ES&S EVS 6.0.3.0 and 6.1.1.0

When Fri Jun 12, 2020 11am – 11:30am Eastern Time - New York

Where https://us02web.zoom.us/j/85886124206?pwd=OVg0MW82UzFHZzB1ODhCZzlLcmVDZz09 (map)

Calendar paumayr(b) (6) ████

Who
- paumayr(b) (6) ████
  - organizer
- smpearson@(b) (6) ████
- zshaw(b) (6) ████
- oletts(b) (6) ████
- stephen.han(b) (6) ████
- michael.walke(b) (6) ████
- slmckay@(b) (6) ████

Paul Aumayr is inviting you to a scheduled Zoom meeting.

Weekly Progress Call for Testing & Certification for ES&S EVS 6.0.3.0 and 6.1.1.0

Join Zoom Meeting
https://us02web.zoom.us/j/85886124206?pwd=OVg0MW82UzFHZzB1ODhCZzlLcmVDZz09

Meeting ID: 858 8612 4206
Password: 010797
One tap mobile
+13017158592,,85886124206# US (Germantown)
+13126266799,,85886124206# US (Chicago)

Dial by your location
+1 301 715 8592 US (Germantown)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 346 248 7799 US (Houston)
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
Meeting ID: 858 8612 4206
Find your local number:
https://us02web.zoom.us/u/kcnGo464cE

Invitation from Google Calendar

You are receiving this email at the account paumay (b) (6) ████ because you are subscribed for invitation replies on calendar
paumay(b) (6) ████

paulmayr@eac.gov.

From: McKay, Sue<slmckay@ (b) (6)

Sent on: Wednesday, May 20, 2020 12:41:03 PM

To: paumayr (b) (6)

Subject: Accepted: Invitation: ES&S EVS and @ Weekly from 11am to 11:30am on Friday from Fri May 22 to Fri Jul 10 (EDT) (slmckay@ (b) (6)

From: <paumayr (b) (6)

Sent on: Thursday, May 28, 2020 5:42:11 PM

To: smpearson@(b) (6)   zshaw(b) (6)   oletts(b) (6)   dmunoz(b) (6)
eburton(b) (6)   jfleming(b) (6)   stephen.han(b) (6) ;
michael.walker(b) (6)   slmckay@(b) (6)

Subject: Invitation: ES&S EVS 6.0.3.0 and 6.1.1.0 @ Weekly from 11am to 11:30am on Friday from Fri
May 29 to Fri Jul 10 (EDT) (eburton(b) (6)

Attachments: invite.ics (4.27 KB)

> **You have been invited to the following event.**

ES&S EVS 6.0.3.0 and 6.1.1.0

When	Weekly from 11am to 11:30am on Friday from Fri May 29 to Fri Jul 10 Eastern Time - New York
Where	https://us02web.zoom.us/j/85886124206?pwd=OVg0MW82UzFHZzB1ODhCZzlLcmVDZz09 (map)
Calendar	eburton(b) (6)
Who	• paumayr(b) (6)
	- organizer
	• smpearson@(b) (6)
	• zshaw(b) (6)
	• oletts(b) (6)
	• dmunoz(b) (6)
	• eburton(b) (6)
	• jfleming(b) (6)
	• stephen.han(b) (6)
	• michael.walke(b) (6)
	• slmckay@(b) (6)

more details »

Paul Aumayr is inviting you to a scheduled Zoom meeting.

Weekly Progress Call for Testing & Certification for ES&S EVS 6.0.3.0 and 6.1.1.0

Join Zoom Meeting
https://us02web.zoom.us/j/85886124206?pwd=OVg0MW82UzFHZzB1ODhCZzlLcmVDZz09

Meeting ID: 858 8612 4206
Password: 010797
One tap mobile
+13017158592,,85886124206# US (Germantown)
+13126266799,,85886124206# US (Chicago)

Dial by your location
+1 301 715 8592 US (Germantown)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 346 248 7799 US (Houston)
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
Meeting ID: 858 8612 4206
Find your local number:
https://us02web.zoom.us/u/kcnGo464cE

Going (eburton**(b) (6)**   All events in this series:
Yes -
Maybe -
No **more options »**

From: Ben Adida<ben@(b) (6)██████
Sent on: Tuesday, June 2, 2020 6:09:53 PM
To: Benjamin Hovland<bhovland@eac.gov>
Subject: Re: following up!

Great! Talk then.

On Tue, Jun 2, 2020 at 11:01 AM Benjamin Hovland <bhovland@eac.gov> wrote:

> I'll just call. Thanks!
>
>
> **From:** Ben Adida <ben@(b) (6)██████
> **Sent:** Tuesday, June 2, 2020 1:32 PM
> **To:** Benjamin Hovland <bhovland@eac.gov>
> **Subject:** Re: following up!
>
>
> Would you prefer phone or Zoom? (b) (6)██████ or I can set up a Zoom.
>
>
> -Ben
>
>
> On Tue, Jun 2, 2020 at 10:15 AM Benjamin Hovland <bhovland@eac.gov> wrote:
>
> > Great. Is there a number I should call?
> >
> >
> > Thanks,
> >
> > Ben
> >
> >
> > **From:** Ben Adida <ben@(b) (6)██████
> > **Sent:** Monday, June 1, 2020 6:04 PM
> > **To:** Benjamin Hovland <bhovland@eac.gov>
> > **Subject:** Re: following up!
> >
> >
> > Hi Ben,
> >
> >
> > Sorry for the delayed response, this morning got busy fast. Today is a bit crazy even for the rest of the

day, but Wed 4eastern works.

-Ben

On Mon, Jun 1, 2020 at 5:49 AM Benjamin Hovland <bhovland@eac.gov> wrote:

> Hi Ben,
>
> That would be great. Short notice, but would this afternoon (ET) be an option for you? I am fairly flexible at this point. If not, would 4pm ET on Wednesday or noon on Thursday are also options. Let me know.
>
> Thanks,
>
> Ben
>
> **From:** Ben Adida <ben@(b) (6)
> **Sent:** Thursday, May 28, 2020 1:28 AM
> **To:** Benjamin Hovland <bhovland@eac.gov>
> **Subject:** following up!
>
> Ben,
>
> It was great chatting a few days ago, and thank you again for the opportunity to testify at the VVSG hearing. We said we'd follow up, which I'd love to do. Is there a good time for you next week?
>
> -Ben
>

email, including all attachments, may constitute a Federal record or other Government property that is intended only for the use of the individual or entity to which it is addressed. If you are not the intended recipient or the employee or agent responsible for delivering the transmission to the intended recipient, you are hereby notified that any dissemination, distribution, copying or use of this email or its contents is strictly prohibited. If you have received this email in error, please notify the sender by responding to the email and then immediately delete the email.

From: <paumayr (b) (6)

Sent on: Friday, June 5, 2020 2:26:14 PM

To: smpearson@(b) (6) zshaw(b) (6) oletts(b) (6) dmunoz(b) (6)
eburton(b) (6) jfleming(b) (6) stephen.han(b) (6)
michael.walker(b) (6) slmckay@(b) (6)

Subject: Canceled event: ES&S EVS 6.0.3.0 and 6.1.1.0 @ Fri Jun 5, 2020 11am - 11:30am (EDT)
(eburton(b) (6)

Attachments: invite.ics (3.61 KB)

This event has been canceled and removed from your calendar.

ES&S EVS 6.0.3.0 and 6.1.1.0

When Fri Jun 5, 2020 11am – 11:30am Eastern Time - New York

Where https://us02web.zoom.us/j/85886124206?pwd=OVg0MW82UzFHZzB1ODhCZzlLcmVDZz09 (map)

Calendar eburton@eac.gov

Who
- paumayr(b) (6)
  - organizer
- smpearson@(b) (6)
- zshaw(b) (6)
- oletts(b) (6)
- dmunoz(b) (6)
- eburton(b) (6)
- jfleming(b) (6)
- stephen.han(b) (6)
- michael.walke(b) (6)
- slmckay@(b) (6)

Paul Aumayr is inviting you to a scheduled Zoom meeting.

Weekly Progress Call for Testing & Certification for ES&S EVS 6.0.3.0 and 6.1.1.0

Join Zoom Meeting
https://us02web.zoom.us/j/85886124206?pwd=OVg0MW82UzFHZzB1ODhCZzlLcmVDZz09

Meeting ID: 858 8612 4206
Password: 010797
One tap mobile
+13017158592,,85886124206# US (Germantown)
+13126266799,,85886124206# US (Chicago)

Dial by your location
+1 301 715 8592 US (Germantown)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 346 248 7799 US (Houston)
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
Meeting ID: 858 8612 4206
Find your local number:
https://us02web.zoom.us/u/kcnGo464cE

Invitation from Google Calendar

You are receiving this email at the account eburton(b) (6) because you are subscribed for cancellations on calendar eburton(b) (6) .

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: mcoutts(b) (6)   (Google Calendar)<mcoutts(b) (6)   (Google Calendar)>

Sent on: Wednesday, June 10, 2020 4:59:57 PM

To: jlovato@eac.gov

Subject: Accepted: VVSG 2.0 Meeting @ Fri Jun 12, 2020 1pm - 2pm (EDT) (jlovato@eac.gov)

Attachments: not supported calendar message.ics (2.08 KB), invite.ics (2.08 KB)

---

mcoutts(b) (6)
has accepted this invitation.

VVSG 2.0 Meeting

When   Fri Jun 12, 2020 1pm – 2pm Eastern Time - New York

Where   https://us02web.zoom.us/j/85758812425?pwd=cUtkdTh6L1A3aCtkenFiakFER2h0QT09 ([map])

Calendar   jlovato@eac.gov

Who
- jlovato@eac.gov
  - organizer
- mcoutts(b) (6)
- slmckay@(b) (6)
- eburton(b) (6)
- pgeppert@(b) (6)
- ajoiner(b) (6)
- gwenyth.winship(b) (6)
- edwin.smith(b) (6)
- zshaw(b) (6)
- ian.piper@(b) (6)
- mharrington@eac.gov
- jack.cobb(b) (6)
- russ.dawson(b) (6)
- jfranklin(b) (6)
- cortiz(b) (6)
- kathy.rogers@(b) (6)
- matt@(b) (6)
- bhirsch(b) (6)
- jbowers(b) (6)
- paumayr(b) (6)
- ben@(b) (6)
- oletts(b) (6)
- tmapps@(b) (6)
- dmunoz(b) (6)
- smpearson@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)

- jfleming(b) (6)

We will discuss a high-level overview of the EAC's plans to address VVSG 2.0 and its associated documents. The agen

Join Zoom Meeting
https://us02web.zoom.us/j/85758812425?pwd=cUtkdTh6L1A3aCtkenFiakFER2h0QT09

Meeting ID: 857 5881 2425
Password: 173087
One tap mobile
+16699006833,,85758812425# US (San Jose)
+12532158782,,85758812425# US (Tacoma)

Dial by your location
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 929 205 6099 US (New York)
+1 301 715 8592 US (Germantown)
+1 312 626 6799 US (Chicago)
888 788 0099 US Toll-free
877 853 5247 US Toll-free
Meeting ID: 857 5881 2425
Find your local number:
https://us02web.zoom.us/u/kcYmTRfdom

From: <jlovato@eac.gov>
Sent on: Wednesday, June 10, 2020 4:07:51 PM
To: mcoutts (b) (6) ; eburton (b) (6) ajoiner (b) (6)
gwenyth.winship (b) (6) zshaw (b) (6) mharrington@eac.gov;
jack.cobb (b) (6) ; russ.dawson (b) (6) ; jfranklin (b) (6)
matt@ (b) (6) bhirsch (b) (6) ; jbowers (b) (6) paumayr (b) (6)
ben@ (b) (6) oletts (b) (6) dmunoz (b) (6) smpearson@ (b) (6)
jfleming (b) (6) slmckay@ (b) (6) pgeppert@ (b) (6)
edwin.smith (b) (6) ian.piper@ (b) (6) cortiz (b) (6) ;
kathy.rogers@ (b) (6) tmapps@ (b) (6) kay.stimson@ (b) (6)
sderheimer@ (b) (6) (b) (6)
Subject: Invitation: VVSG 2.0 Meeting @ Fri Jun 12, 2020 1pm - 2pm (EDT) (jfranklin
Attachments: invite.ics (6.62 KB)

| You have been invited to the following event. |

VVSG 2.0 Meeting

When	Fri Jun 12, 2020 1pm – 2pm Eastern Time - New York
Where	https://us02web.zoom.us/j/85758812425?pwd=cUtkdTh6L1A3aCtkenFiakFER2h0QT09 (map)
Calendar	jfranklin (b) (6)
Who	

- jlovato@eac.gov
  - organizer
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- matt@ (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben@ (b) (6)
- oletts (b) (6)
- dmunoz (b) (6)
- smpearson@ (b) (6)
- jfleming (b) (6)
- slmckay@ (b) (6)
- pgeppert@ (b) (6)
- edwin.smith (b) (6)
- ian.piper@ (b) (6)

EAC-0171

- cortiz**(b) (6)**
- kathy.rogers@**(b) (6)**
- tmapps@**(b) (6)**
- kay.stimson@**(b) (6)**
- sderheimer@**(b) (6)**

more details »
We will discuss a high-level overview of the EAC's plans to address VVSG 2.0 and its associated documents. The agen

Join Zoom Meeting
https://us02web.zoom.us/j/85758812425?pwd=cUtkdTh6L1A3aCtkenFiakFER2h0QT09

Meeting ID: 857 5881 2425
Password: 173087
One tap mobile
+16699006833,,85758812425# US (San Jose)
+12532158782,,85758812425# US (Tacoma)

Dial by your location
+1 669 900 6833 US (San Jose)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 929 205 6099 US (New York)
+1 301 715 8592 US (Germantown)
+1 312 626 6799 US (Chicago)
888 788 0099 US Toll-free
877 853 5247 US Toll-free
Meeting ID: 857 5881 2425
Find your local number:
https://us02web.zoom.us/u/kcYmTRfdom

Going (jfranklin**(b) (6)**
Yes -
Maybe -
Nomore options »

From: <jlovato@eac.gov>
Sent on: Tuesday, June 23, 2020 1:40:43 AM
To: mcoutts (b) (6) eburton (b) (6) ; ajoiner (b) (6) gwenyth.winship (b) (6) zshaw (b) (6) mharrington@eac.gov; jack.cobb (b) (6) ; russ.dawson (b) (6) ; jfranklin (b) (6) ginnyb (b) (6) ; matt@ (b) (6) bhirsch (b) (6) ; jbowers@eac.gov; paumayr (b) (6) ben@ (b) (6) oletts (b) (6) ; mturner (b) (6) dmunoz (b) (6) smpearson@ (b) (b) mary.brady@ (b) (6) jfleming (b) (6) michael.walker (b) (6) msantos@ (b) (6) edwin.smith (b) (6) ian.piper@ (b) (b) cortiz (b) (6) kathy.rogers@ (b) (b) wendy.owens (b) (6) aaron.wilson (b) (6) tmapps@ (b) (b) kay.stimson@ (b) (b) sderheimer@ (b) (b) jcanter@ (b) (6)

Subject: Invitation: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly from 1pm to 2pm on Friday from Fri Jun 26 to Fri Oct 16 (EDT) (eburton (b) (6)

Attachments: invite.ics (7.41 KB)

You have been invited to the following event.

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Weekly from 1pm to 2pm on Friday from Fri Jun 26 to Fri Oct 16 Eastern Time - New York
Where	https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (map)
Calendar	eburton (b) (6)
Who	

- jlovato@eac.gov
  - organizer
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- matt@ (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben@ (b) (6)
- oletts (b) (6)
- mturne (b) (6)
- dmunoz (b) (6)
- smpearson@ (b) (6)
- mary.brady@ (b) (6)

- jfleming(b) (6)
- michael.walke (b) (6)
- msantos@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- cortiz(b) (6)
- kathy.rogers@(b) (6)
- wendy.owens(b) (6)
- aaron.wilson(b) (6)
- tmapps@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- jcanter@(b) (6)

more details »
Jerome Lovato is inviting you to a scheduled Zoom meeting.

Going (eburton(b) (6) ?All events in this series:
Yes -
Maybe -
No **more options »**

From: Ben Adida<ben@(b) (6)■■■■■

Sent on: Thursday, July 2, 2020 4:14:38 PM

To: Benjamin Hovland<bhovland@eac.gov>

Subject: Re: checking in

Great talk soon!

On Thu, Jul 2, 2020 at 8:03 AM Benjamin Hovland <bhovland@eac.gov> wrote:

> Sorry, I left off that I can call you.
>
> Sent from my iPhone
>
>> On Jul 1, 2020, at 5:04 PM, Ben Adida <ben@(b) (6)■■■■ wrote:
>>
>> Yes, that works! Do you want to call me at (b) (6)■■■■ or should I call you?
>>
>> -Ben
>>
>> On Wed, Jul 1, 2020 at 12:28 PM Benjamin Hovland <bhovland@eac.gov> wrote:
>>
>>> Would 2pm ET work for you tomorrow?
>>>
>>> **From:** Ben Adida <ben@(b) (6)■■■■
>>> **Sent:** Wednesday, July 1, 2020 1:53 PM
>>> **To:** Benjamin Hovland <bhovland@eac.gov>
>>> **Subject:** Re: checking in
>>>
>>> Hi Ben,
>>>
>>> Ah today is a mess. Tomorrow or Friday?
>>>
>>> -Ben
>>>
>>> On Tue, Jun 30, 2020 at 8:06 PM Benjamin Hovland <bhovland@eac.gov> wrote:
>>>
>>>> Short notice, but tomorrow has turned out to be fairly flexible for me if there is a good time on your end. Let me know.

Thanks,
Ben

Sent from my iPhone

> On Jun 30, 2020, at 3:09 PM, Ben Adida <ben@(b) (6)   wrote:
>
>
>
> Ben,
>
> I wanted to give you an update on our vote-by-mail work, whenever you have a chance. No rush, let me know when might work for you.
>
> -Ben

--

From: <jlovato@eac.gov>
Sent on: Wednesday, June 24, 2020 4:07:14 PM
To: mcoutts (b) (6) eburton (b) (6) ajoiner (b) (6) gwenyth.winship (b) (6) zshaw (b) (6) mharrington@eac.gov; jack.cobb (b) (6) russ.dawson (b) (6) jfranklin (b) (6) ginnyb (b) (6) matt@ (b) (6) bhirsch (b) (6) jbowers (b) (6) paumayr (b) (6) ben@ (b) (6) oletts (b) (6) mturner (b) (6) dmunoz (b) (6) smpearson@ (b) (b) mary.brady@ (b) (6) jfleming (b) (6) michael.walker (b) (6) msantos@ (b) (6) edwin.smith (b) (6) ian.piper@ (b) (b) cortiz (b) (6) ; kathy.rogers@ (b) (b) wendy.owens (b) (6) ; aaron.wilson (b) (6) tmapps@ (b) (b) kay.stimson@ (b) (b) sderheimer@ (b) (b) jcanter@ (b) (6) Edwin Smith< (b) (6)

Subject: Canceled event with note: VVSG 2.0 Implementation Working Group Weekly Meeting @ Fri Jul 3, 2020 1pm - 2pm (EDT) (eburton (b) (6)

Attachments: invite.ics (6.63 KB)

This event has been canceled and removed from your calendar with this note:
"Canceling this meeting since it is a holiday."

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Fri Jul 3, 2020 1pm – 2pm Eastern Time - New York
Where	https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (map)
Calendar	eburton (b) (6)
Who	

- jlovato@eac.gov
  - organizer
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- matt@ (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben@ (b) (6)
- oletts (b) (6)
- mturner (b) (6)
- dmunoz (b) (6)
- smpearson@ (b) (6)

- mary.brady@(b) (6)
- jfleming(b) (6)
- michael.walke(b) (6)
- msantos@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- cortiz(b) (6)
- kathy.rogers@(b) (6)
- wendy.owens(b) (6)
- aaron.wilson(b) (6)
- tmapps@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- jcanter@(b) (6)
- Edwin Smith

Jerome Lovato is inviting you to a scheduled Zoom meeting.

From: <eburton(b) (6)

Sent on: Thursday, July 2, 2020 7:46:44 PM

To: jlovato@eac.gov; jbernal@(b) (6) tmapps@(b) (6)
jpanek@(b) (6) calford@(b) (6) pgeppert@(b) (6)

Subject: Invitation: Hart Intercivic Verity 2.5 @ Tue Jul 7, 2020 2pm - 2:45pm (EDT)
(jlovato@eac.gov)

Attachments: invite.ics (3.34 KB)

You have been invited to the following event.

Hart Intercivic Verity 2.5

When   Tue Jul 7, 2020 2pm – 2:45pm Eastern Time - New York

Where   https://us02web.zoom.us/j/87895768198?pwd=ZGVFczlvUUVuc0JHOG54eTZ3aHFRQT09 (map)

Calendar   jlovato@eac.gov

Who

- eburton(b) (6)
  - organizer
- jlovato@eac.gov
- jbernal@(b) (6)
- tmapps@(b) (6)
- jpanek@(b) (6)
- calford@(b) (6)
- pgeppert@(b) (6)

more details »
Eugene Burton is inviting you to a scheduled Zoom meeting.

Going (jlovato@eac.gov)?
Yes -
Maybe -
No **more options »**

From: <eburton (b) (6)

Sent on: Tuesday, July 14, 2020 1:25:34 PM

To: jlovato@eac.gov; jbernal@(b) (6)   jpanek@(b) (6)
calford@(b) (6)   pgeppert@(b) (6)

Subject: Invitation: Hart Intercivic Verity 2.5 @ Weekly from 2pm to 2:45pm on Tuesday from Tue Jul 14 to Tue Oct 13 (EDT) (jlovato@eac.gov)

Attachments: invite.ics (3.21 KB)

You have been invited to the following event.

Hart Intercivic Verity 2.5

When   Weekly from 2pm to 2:45pm on Tuesday from Tue Jul 14 to Tue Oct 13 Eastern Time - New York

Where   https://us02web.zoom.us/j/87895768198?pwd=ZGVFczlvUUVuc0JHOG54eTZ3aHFRQT09 (map)

Calendar   jlovato@eac.gov

Who
- eburton(b) (6)
  - organizer
- jlovato@eac.gov
- jbernal@(b) (6)
- jpanek@(b) (6)
- calford@(b) (6)
- pgeppert@(b) (6)

more details »
Eugene Burton is inviting you to a scheduled Zoom meeting.

Going (jlovato@eac.gov)?All events in this series:
Yes -
Maybe -
Nomore options »

Invitation from Google Calendar

Join Microsoft Teams Meeting

Learn more about Teams | Meeting options

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From: Google Calendar<calendar-notification@google.com> on behalf of ben@(b) (6)

Sent on: Tuesday, June 23, 2020 1:40:46 AM

To: jlovato@eac.gov

Subject: Declined: VVSG 2.0 Implementation Working Group Weekly Meeting @ Fri Jul 17, 2020 1pm - 2pm (EDT) (ben@(b) (6)

Attachments: invite.ics (1.96 KB)

---

ben@(b) (6)
has declined this invitation with this note:
"Declined because I am out of office"

VVSG 2.0 Implementation Working Group Weekly Meeting

When   Fri Jul 17, 2020 1pm – 2pm Eastern Time - New York

Where   https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 ([map](#))

Calendar   ben@(b) (6)

Who
- jlovato@eac.gov
  - organizer
- mcoutts(b) (6)
- eburton(b) (6)
- ajoiner(b) (6)
- gwenyth.winship(b) (6)
- zshaw(b) (6)
- mharrington@eac.gov
- jack.cobb(b) (6)
- russ.dawson(b) (6)
- jfranklin(b) (6)
- ginnyb(b) (6)
- matt@(b) (6)
- bhirsch(b) (6)
- jbowers(b) (6)
- paumayr(b) (6)
- ben@(b) (6)
- oletts(b) (6)
- mturne(b) (6)
- dmunoz(b) (6)
- smpearson@(b) (6)
- mary.brady@(b) (6)
- jfleming(b) (6)
- michael.walke(b) (6)
- msantos@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- cortiz(b) (6)

- kathy.rogers@(b) (6)
- wendy.owens(b) (6)
- aaron.wilson(b) (6)
- tmapps@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- jcanter@(b) (6)

Jerome Lovato is inviting you to a scheduled Zoom meeting.

From: Pamela Geppert<pgeppert@ (b) (6) ██████

Sent on: Thursday, July 16, 2020 8:28:39 PM

To: eburton (b) (6) ██████

Subject: Accepted: Updated invitation: Hart Intercivic Verity 2.5 @ Tue Jul 21, 2020 11:30am - 12:15pm (EDT) (pgeppert@ (b) (6) ██████

From: <jlovato@eac.gov>
Sent on: Friday, July 24, 2020 3:12:00 PM
To: mcoutts (b) (6)   eburton (b) (6)   ; ajoiner (b) (6)
gwenyth.winship (b) (6)   ; zshaw (b) (6)   mharrington@eac.gov;
jack.cobb (b) (6)   russ.dawson (b) (6)   ; jfranklin (b) (6)
ginnyb (b) (6)   ; matt@ (b) (6)   bhirsch (b) (6)   jbowers (b) (6)
paumayr (b) (6)   ben@ (b) (6)   oletts (b) (6)   mturner (b) (6)   dmunoz (b) (6)
smpearson@ (b) (b)   mary.brady@ (b) (6)   jfleming (b) (6)   Laskowski, Sharon J. Dr.
(Fed) (b) (6)   >; Wack, John P. ((b) (6)
aregenscheid@ (b) (b)   michael.walker (b) (6)   ; msantos@ (b) (b)
edwin.smith (b) (6)   ; ian.piper@ (b) (b)   cortiz (b) (6)
kathy.rogers@ (b) (b)   wendy.owens (b) (6)   ; aaron.wilson (b) (6)
tmapps@ (b) (6)   kay.stimson@ (b) (b)   sderheimer@ (b) (b)
jcanter@ (b) (6)   Edwin Smith (b) (6)   ; Wilburg, Patricia
(Fed)< (b) (6)   ; Hallett, Tim< (b) (6)   ; Richbourg,
Paige< (b) (6)
Subject: Updated invitation: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly
from 1pm to 2pm on Friday from Fri Jul 24 to Thu Jul 30 (EDT) (jfleming@ (b) (6)
Attachments: invite.ics (8.13 KB)

This event has been changed.

VVSG 2.0 Implementation Working Group Weekly Meeting

When   Weekly from 1pm to 2pm on Friday from Fri Jul 24 to Thu Jul 30 Eastern Time - New York

Calendar   jfleming (b) (6)

Who
- jlovato@eac.gov
  - organizer
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- matt@ (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben@ (b) (6)
- oletts (b) (6)
- mturner (b) (6)
- dmunoz (b) (6)
- smpearson@ (b) (6)

- mary.brady@(b) (6)
- jfleming(b) (6)
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid@(b) (6)
- michael.walke(b) (6)
- msantos@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- cortiz(b) (6)
- kathy.rogers@(b) (6)
- wendy.owens@(b) (6)
- aaron.wilson(b) (6)
- tmapps@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- jcanter@(b) (6)
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

[more details »](#)
Join Zoom Meeting

Going (jfleming(b) (6) ?All events in this series:
Yes -
Maybe -
No[more options »](#)

From: Jared Bernal <jbernal@(b) (6)

Sent on: Tuesday, July 28, 2020 1:13:48 PM

To: eburton(b) (6)

Subject: Accepted: Invitation: Hart Intercivic Verity 2.5 @ Weekly from 11:30am to 12:15pm on Tuesday from Tue Jul 28 to Tue Oct 13 (EDT) (jbernal@(b) (6)

From: <jlovato@eac.gov>
Sent on: Thursday, July 23, 2020 7:44:32 PM
To: mcoutts (b) (6) eburton (b) (6) ajoiner (b) (6) gwenyth.winship (b) (6) zshaw (b) (6) mharrington@eac.gov; jack.cobb (b) (6) russ.dawson (b) (6) jfranklin (b) (6) ginnyb (b) (6) ; matt@ (b) (6) bhirsch (b) (6) ; jbowers (b) (6) ; paumayr (b) (6) ben@ (b) (6) oletts (b) (6) mturner (b) (6) dmunoz (b) (6) smpearson@ (b) (b) mary.brady@ (b) (6) jfleming (b) (6) Laskowski, Sharon J. Dr. (Fed)< (b) (6) ; Wack, John P. (Ctr)< (b) (6) aregenscheid@ (b) (b) michael.walker (b) (6) msantos@ (b) (b) edwin.smith (b) (6) ian.piper@ (b) (b) cortiz (b) (6) kathy.rogers@ (b) (b) wendy.owens (b) (6) aaron.wilson (b) (6) ; tmapps@ (b) (6) kay.stimson@ (b) (b) sderheimer@ (b) (b) jcanter@ (b) (6) Edwin Smith<edwin.smith (b) (6) Wilburg, Patricia (Fed)< (b) (6) ; Hallett, Tim (b) (6) Richbourg, Paige< (b) (6)
Subject: Updated invitation with note: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly from 1pm to 2pm on Friday from Fri Jul 31 to Fri Oct 16 (EDT) (eburton (b) (6)
Attachments: invite.ics (8.63 KB)

This event has been changed with this note:
"I updated the Zoom link for our weekly meetings."

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Weekly from 1pm to 2pm on Friday from Fri Jul 31 to Fri Oct 16 Eastern Time - New York
Where	https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (map)
Calendar	eburton (b) (6)
Who	

- jlovato@eac.gov
  - organizer
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- matt@ (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben@ (b) (6)
- oletts@ (b) (6)
- mturne (b) (6)

- dmunoz(b) (6)
- smpearson@(b) (6)
- mary.brady@(b) (6)
- jfleming(b) (6)
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid@(b) (6)
- michael.walke(b) (6)
- msantos@(b) (6)
- edwin.smith(b) (6)
- ian.piper@(b) (6)
- cortiz(b) (6)
- kathy.rogers@(b) (6)
- wendy.owens(b) (6)
- aaron.wilson(b) (6)
- tmapps@(b) (6)
- kay.stimson@(b) (6)
- sderheimer@(b) (6)
- jcanter@(b) (6)
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

more details »
Changed:

Going (eburton(b) (6) ?All events in this series:
Yes -
Maybe -
Nomore options »

Invitation from Google Calendar

You are receiving this email at the account eburton (b) (6) because you are subscribed for updated invitations on calendar eburton (b) (6)

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: <mturner (b) (6)

Sent on: Wednesday, July 29, 2020 1:51:54 PM

To: mcoutts (b) (6) eburton (b) (6) jlovato@eac.gov; ajoiner (b) (6) gwenyth.winship (b) (6) zshaw (b) (6) mharrington@eac.gov; jack.cobb (b) (6) ; russ.dawson (b) (6) ; jfranklin (b) (6) ginnyb (b) (6) matt@ (b) (6) bhirsch (b) (6) jbowers (b) (6) paumayr (b) (6) ben@ (b) (6) oletts (b) (6) dmunoz (b) (6) smpearson@ (b) (6) mary.brady@ (b) (6) jfleming (b) (6) Laskowski, Sharon J. Dr. (Fed)< (b) (6) ; Wack, John P. (Ctr) (b) (6) ; aregenscheid@ (b) (6) Howell, Gema E. (Fed) (b) (6) ; Carnahan, Lisa J. (Fed) (b) (6) ; michael.walker (b) (6) msantos@ (b) (6) edwin.smith (b) (6) ; ian.piper@ (b) (6) cortiz (b) (6) kathy.rogers@ (b) (6) wendy.owens (b) (6) ; aaron.wilson (b) (6) tmapps@ (b) (6) kay.stimson@ (b) (6) sderheimer@ (b) (6) jcanter@ (b) (6) Edwin Smith< (b) (6) ; Wilburg, Patricia (Fed) (b) (6) ; Hallett, Tim< (b) (6) Richbourg, Paige (b) (6)

Subject: Canceled event with note: VVSG 2.0 Implementation Working Group Weekly Meeting @ Fri Jul 31, 2020 1pm - 2pm (EDT) (jfleming (b) (6)

Attachments: invite.ics (7.55 KB)

This event has been canceled and removed from your calendar with this note:

"Due to the EAC Standards Board hearing this Friday, which requires the involvement of NIST and EAC staff, this Friday's Implementation Working Group call is canceled. Next week's call will occur as scheduled."

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Fri Jul 31, 2020 1pm – 2pm Eastern Time - New York
Calendar	jfleming (b) (6)
Who	

- mturne (b) (6)
  - organizer
- jlovato@eac.gov
  - creator
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- matt@ (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben (b) (6)

EAC-0194

- bdh@ (b) (6)
- oletts (b) (6)
- dmunoz (b) (6)
- smpearson@ (b) (6)
- mary.brady@ (b) (6)
- jfleming (b) (6)
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid@ (b) (6)
- Howell, Gema E. (Fed)
- Carnahan, Lisa J. (Fed)
- michael.walke (b) (6)
- msantos@ (b) (6)
- edwin.smith (b) (6)
- ian.piper@ (b) (6)
- cortiz (b) (6)
- kathy.rogers@ (b) (6)
- wendy.owens (b) (6)
- aaron.wilson (b) (6)
- tmapps@ (b) (6)
- kay.stimson@ (b) (6)
- sderheimer@ (b) (6)
- jcanter@ (b) (6)
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

Join Zoom Meeting

From: Maurice Turner<mturner█(b) (6)█

Sent on: Thursday, August 6, 2020 8:18:20 PM

To: aaron.wilson█(b) (6)█ ajoiner█(b) (6)█ aregenscheid@█(b) (6)█ ben@█(b) (6)█ bhirsch█(b) (6)█ cortiz█(b) (6)█ dmunoz█(b) (6)█ eburton█(b) (6)█ edwin.smith█(b) (6)█ ginnyb@█(b) (6)█ gwenyth.winship█(b) (6)█ ian.piper@█(b) (b)█ jack.cobb█(b) (6)█ ; jbowers█(b) (6)█ jcanter@█(b) (6)█ jfleming█(b) (6)█ jfranklin█(b) (6)█ john.wack@█(b) (b)█ kathy.rogers@█(b) (6)█ kay.stimson@█(b) (b)█ mary.brady@█(b) (6)█ matt@█(b) (6)█ mcoutts█(b) (6)█ mharrington@eac.gov; michael.walker█(b) (6)█ msantos@█(b) (b)█ mturner█(b) (6)█ oletts█(b) (6)█ patricia.wilburg@█(b) (6)█ paumayr█(b) (6)█ ; russ.dawson█(b) (6)█ sderheimer@█(b) (6)█ sharon.laskowski@█(b) (6)█ smpearson@█(b) (b)█ tjhallett@█(b) (6)█ tmapps@█(b) (6)█ wendy.owens█(b) (6)█ Jerome Lovato<jlovato@eac.gov>

Subject: Canceled: VVSG 2.0 Implementation Working Group Meeting for 8/7

Unfortunately, tomorrow's meeting is canceled. We are considering some of the issues that have been raised and re-evaluating the format of the discussion group. Thank you for your contributions thus far.

Maurice Turner
Senior Advisor
U.S. Election Assistance Commission
█(b) (6)█ | www.eac.gov

EAC-0197

From: Maurice Turner<mturner(b) (6)

Sent on: Thursday, August 13, 2020 8:29:15 PM

To: aaron.wilson(b) (6) ajoiner(b) (6) aregenscheid@(b) (6) ben@(b) (6) bhirsch(b) (6) cortiz(b) (6) ; dmunoz(b) (6) eburton(b) (6) edwin.smith(b) (6) ginnyb(b) (6) gwenyth.winship(b) (6) ian.piper@(b) (6) jack.cobb(b) (6) ; jbowers(b) (6) jcanter@(b) (6) jfleming(b) (6) jfranklin(b) (6) john.wack@(b) (6) kathy.rogers@(b) (6) kay.stimson@(b) (6) mary.brady@(b) (6) matt@(b) (6) mcoutts(b) (6) ; mharrington@eac.gov; michael.walker(b) (6) msantos@(b) (6) mturner(b) (6) oletts(b) (6) patricia.wilburg@(b) (6) paumayr(b) (6) russ.dawson(b) (6) sderheimer@(b) (6) sharon.laskowski@(b) (6) smpearson@(b) (6) tjhallett@(b) (6) tmapps@(b) (6) wendy.owens(b) (6) ; Jerome Lovato<jlovato@eac.gov>

Subject: Canceled: VVSG 2.0 Implementation Working Group Meetings

We are moving forward with a different format to achieve the same goal of evaluating, developing, and refining the requirements, test assertions and program manuals in order to bring the complete VVSG 2.0 to the Commissioners by the end of the year. Future collaborative sessions will be announced at a later time. Please continue to send your feedback and ideas directly to Jerome. Thank you for your commitment to the VVSG 2.0 process.

Maurice Turner
Senior Advisor
U.S. Election Assistance Commission
(b) (6) | www.eac.gov

EAC-0198

From: smpearson@(b) (6) ▐ (Google Calendar)<smpearson@(b) (6) ▐ (Google Calendar)>
Sent on: Tuesday, September 1, 2020 5:57:04 PM
To: eburton(b) (6) ▐
Subject: Accepted: DS200 Marketing Material Discussion @ Wed Sep 9, 2020 4pm - 5pm (EDT) (eburton@eac.gov)
Attachments: not supported calendar message.ics (1.8 KB), invite.ics (1.8 KB)

---

smpearson@(b) (6) ▐
has accepted this invitation.

DS200 Marketing Material Discussion

When	Wed Sep 9, 2020 4pm – 5pm Eastern Time - New York
Calendar	eburton(b) (6) ▐
Who	

- eburton(b) (6) ▐
  - organizer
- jlovato@eac.gov
- kathy.rogers@(b) (6) ▐
- smpearson@(b) (6) ▐

Topic: DS200 Marketing Material Discussion
Time: Sep 9, 2020 04:00 PM Eastern Time (US and Canada)

Join Zoom Meeting
https://eac-gov.zoom.us/j/86134577742?pwd=NDhvc2pCRWcvWi9ZcGNOOXBhZXJGdz09

Meeting ID: 861 3457 7742
Passcode: (b) (6) ▐
One tap mobile
+12532158782,,86134577742# US (Tacoma)
+13462487799,,86134577742# US (Houston)

Dial by your location
    +1 253 215 8782 US (Tacoma)
    +1 346 248 7799 US (Houston)
    +1 669 900 6833 US (San Jose)
    +1 301 715 8592 US (Germantown)
    +1 312 626 6799 US (Chicago)
    +1 929 205 6099 US (New York)
    877 853 5247 US Toll-free
    888 788 0099 US Toll-free
Meeting ID: 861 3457 7742
Find your local number:https://eac-gov.zoom.us/u/kblOXZIhpK

Invitation from Google Calendar

You are receiving this email at the account eburton (b) (6) ▐ because you are subscribed for invitation replies on calendar eburton(b) (6) ▐

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: Google Calendar<calendar-notification@google.com> on behalf of ben@(b) (6)

Sent on: Tuesday, September 22, 2020 6:53:03 PM

To: jlovato@eac.gov

Subject: Accepted: RFI discussion @ Wed Sep 23, 2020 3pm - 3:30pm (EDT) (jlovato@eac.gov)

Attachments: invite.ics (609 Bytes)

---

ben@(b) (6)
has accepted this invitation.

RFI discussion

When	Wed Sep 23, 2020 3pm – 3:30pm Eastern Time - New York
Calendar	jlovato@eac.gov
Who	• jlovato@eac.gov - organizer • ben@(b) (6)

Invitation from **Google Calendar**

You are receiving this email at the account jlovato@eac.gov because you are subscribed for invitation replies on calendar jlovato@eac.gov.

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: <paumayr█████(b) (6)████████

Sent on: Tuesday, September 22, 2020 1:46:54 PM

To: jfleming@eac.gov; michael.walker███(b) (6)███████ cortiz███(b) (6)███████ wendy.owens██(b) (6)████████ ryan.wilson██(b) (6)███████

Subject: Invitation: Unisyn OpenElect 2.2 @ Weekly from 11am to 11:30am on Friday 10 times (EDT) (jfleming███(b) (6)███████

Attachments: invite.ics (3.11 KB)

You have been invited to the following event.

Unisyn OpenElect 2.2

When	Weekly from 11am to 11:30am on Friday 10 times Eastern Time - New York
Where	https://eac-gov.zoom.us/j/88370676881?pwd=ZVgvSzNsVzRYV3VpMnhidW1IaHNtdz09 (map)
Calendar	jfleming██(b) (6)████
Who	

- paumayr██(b) (6)████
  - organizer
- jfleming██(b) (6)████
- michael.walke██(b) (6)████
- cortiz██(b) (6)███████
- wendy.owens██(b) (6)████
- ryan.wilson██(b) (6)████

more details »
Paul Aumayr is inviting you to a scheduled Zoom meeting.

Going (jfleming██(b) (6)████?All events in this series:
Yes -
Maybe -
No **more options »**

Invitation from **Google Calendar**

You are receiving this email at the account jfleming██(b) (6)████ because you are subscribed for invitations on calendar jfleming██(b) (6)████

From: Pearson, Steve<s(b) (6)███████████████

Sent on: Monday, September 28, 2020 5:00:53 PM

To: Kevin Rayburn<KRayburn@eac.gov>; Mona Harrington<mharrington@eac.gov>; Jerome Lovato<jlovato@eac.gov>; kathy.rogers@(b) (6)███████ Weber, Gary<(b) (6)███████████;
Hallett, Tim(b) (6)███████

Subject: Texas EV 1.0

Hopefully you all can attend. Talk to you soon.

Thanks,

Steve

Join Microsoft Teams Meeting

Learn more about Teams | Meeting options

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Help | Legal

Subject:	Texas EV 1.0
Start:	Mon 9/28/2020 2:00 PM
End:	Mon 9/28/2020 3:00 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer:	Pearson, Steve

Hopefully you all can attend. Talk to you soon.

Thanks,
Steve

_____

Join Microsoft Teams Meeting<https://teams.microsoft.com/l/meetup-join/(b) (6)

Learn more about Teams<https://aka.ms/JoinTeamsMeeting> | Meeting options<https://teams.microsoft.com/meetingOptions/(b) (6)

[https://sft.essvote.com/images/InstLogos/logobig_1216.png]
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Help<https://support.office.com/en-us/article/join-a-teams-meeting-078e9868-f1aa-4414-8bb9-ee88e9236ee4> |
Legal<https://www.essvote.com/legal/>

_____

From: Pearson, Steve<smpearson@(b) (6)

Sent on: Wednesday, September 30, 2020 7:18:09 PM

To: mharrington@eac.gov; krayburn@eac.gov; jlovato@eac.gov; Burt, Thomas<teburt@(b) (6) Rogers, Kathy<(b) (6) Weber, Gary(b) (6) ; Anderson, Eric(b) (6)

Subject: ExpressVote 1.0 Followup

Join Microsoft Teams Meeting

Learn more about Teams | Meeting options

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Subject:	ExpressVote 1.0 Followup
Start:	Wed 9/30/2020 4:30 PM
End:	Wed 9/30/2020 5:00 PM
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Pearson, Steve

_____

Join Microsoft Teams Meeting<https://teams.microsoft.com/l/meetup-
join/(b) (6)

Learn more about Teams<https://aka.ms/JoinTeamsMeeting> | Meeting
options<https://teams.microsoft.com/(b) (6)

[https://sft.essvote.com/images/InstLogos/logobig_1216.png]
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Help<https://support.office.com/en-us/article/join-a-teams-meeting-078e9868-f1aa-4414-8bb9-ee88e9236ee4> |
Legal<https://www.essvote.com/legal/>

_____

From: mcoutts (b) (6) ████████ (Google Calendar)<mcoutts (b) (6) ████████ (Google Calendar)>

Sent on: Friday, October 9, 2020 1:52:07 PM

To: paumayr (b) (6) ████

Subject: Accepted: Unisyn OpenElect 2.2 @ Weekly from 11am to 11:30am on Friday 10 times (EDT) (paumayr (b) (6) ████)

Attachments: not supported calendar message.ics (1.8 KB), invite.ics (1.8 KB)

**mcoutts (b) (6) ████████
has accepted this invitation.**

Unisyn OpenElect 2.2

When	Weekly from 11am to 11:30am on Friday 10 times Eastern Time - New York
Where	https://eac-gov.zoom.us/j/88370676881?pwd=ZVgvSzNsVzRYV3VpMnhidW1IaHNtdz09 ([map](#))
Calendar	paumayr (b) (6) ████
Who	• paumayr (b) (6) ████ - organizer • michael.walke (b) (6) ████ • cortiz (b) (6) ████ • wendy.owens (b) (6) ████ • jfleming (b) (6) ████ • ryan.wilson (b) (6) ████ • McDermot Coutts

Paul Aumayr is inviting you to a scheduled Zoom meeting.

EAC-0207

EAC-0208

From: Jerome Lovato<jlovato@eac.gov> on behalf of Jerome Lovato
Sent on: Thursday, October 15, 2020 9:32:35 PM
To: Jim Canter (b) (6) ; undefined<sderheimer@ (b) (6) Wack, John
(Fed)(b) (6) ; danny.casias (b) (6) ; edwin.smith (b) (6) Michael
Santos<(b) (6) Paul Aumayr<(b) (6) >; Jessica
Fleming<(b) (6) ; Joshua Franklin<(b) (6) ; Jessica
Bowers<(b) (6) ; Eugene Burton (b) (6)
Subject: VVSG 2.0 Requirements Discussion

Topic: VVSG 2.0 Requirements Discussion
Time: Oct 19, 2020 04:00 PM Eastern Time (US and Canada)

Join Zoom Meeting
https://eac-gov.zoom.us/j/87947193000?pwd=UFlhRXo2bC8wcVUwcHczem9vOElzQT09

Meeting ID: 879 4719 3000
Passcode: 547654
One tap mobile
+12532158782,,87947193000# US (Tacoma)
+13462487799,,87947193000# US (Houston)

Dial by your location
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 669 900 6833 US (San Jose)
+1 301 715 8592 US (Germantown)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
877 853 5247 US Toll-free
888 788 0099 US Toll-free
Meeting ID: 879 4719 3000
Find your local number: https://eac-gov.zoom.us/u/kGOcm0J2X

From: Mona Harrington<mharrington@eac.gov>
Sent on: Tuesday, May 5, 2020 5:27:36 PM
To: COrtiz (b) (6) ; Rogers, Kathy< (b) (6)
kay.stimson (b) (6) Hart Intercivic:<PLichtenheld (b) (6)
bhirsch (b) (6) ; Smartmatic:<edwin.smith (b) (6) >; Clear Ballot
Group:<keir.holeman (b) (6) ; Jerome (jlovato@eac.gov)<Jerome (jlovato@eac.gov)>;
Jessica Bowers (b) (6)
Subject: EAC/Vendor Meeting

Call in information:
1-866-823-7147,, ▮▮▮▮▮
Agenda:
- Staffing Update
- Building to VVSG 2.0
- VVSG 2.0 upcoming hearing: May 6, May 20
- Any other comments, questions, or concerns

Respectfully Yours,
Mona Harrington

U.S. Election Assistance Commission Public Hearing
VVSG 2.0 Requirements Hearing 3: Manufacturers & Voting System Test Labs

Wednesday, May 20, 2020
1:30 p.m. – 3:30 p.m. Eastern
Livestreamed on YouTube

AGENDA

Call to Order
Roll Call
Adoption of Previous Meeting Minutes
Adoption of the Agenda

Introductory Remarks
- **Ben Hovland**, Chairman, U.S. Election Assistance Commission
- **Don Palmer**, Vice Chair, U.S. Election Assistance Commission
- **Tom Hicks**, Commissioner, U.S. Election Assistance Commission
- **Christy McCormick**, Commissioner, U.S. Election Assistance Commission

Panel I: Manufacturers
- **Steve Pearson**, Sr. Vice President of Certification, ES&S
- **Ian Piper**, Director, Federal Certification, Dominion
- **Edwin Smith**, Director, Global Services and Certification, Smartmatic
- **Bernie Hirsch**, Chief Information Officer, MicroVote
- **McDermot Coutts**, Chief Software Architect & Director of Software Development, Unisyn
- **Ben Adida**, Executive Director, VotingWorks
- **Jim Canter**, Chief Technology Officer, Hart
- **Russ Dawson**, Federal Certification Program Manager, Clear Ballot Group

Panel II: Voting System Testing Labs
- **Mike Santos –** Senior Test Manager, SLI Compliance
- **Jack Cobb –** Co-founder and Laboratory Director, Pro V&V, Inc.

Public Testimony
Closing Remarks – Chairman Hovland
Adjournment

U.S. Election Assistance Commission VVSG 2.0 Implementation Working Group Agenda
June 26, 2020

1. Roll call
2. Review the goal of the working group
3. Provide overview of public comments received
4. Review a sample of manufacturer comments
5. Explain test assertion process
6. Outline agenda for next meeting

From: Maurice Turner<mturner ██(b) (6)██

Sent on: Thursday, July 23, 2020 9:00:59 PM

To: aaron.wilson ██(b) (6)██ ; ajoiner ██(b) (6)██ ; aregenscheid ██(b) (6)██ ; ben ██(b) (6)██
bhirsch ██(b) (6)██ cortiz ██(b) (6)██ dmunoz ██(b) (6)██ eburton ██(b) (6)██ ;
edwin.smith ██(b) (6)██ ; ginnyb ██(b) (6)██ gwenyth.winship ██(b) (6)██
ian.piper ██(b) (6)██ jack.cobb ██(b) (6)██ ; jbowers ██(b) (6)██ jcanter ██(b) (6)██
jfleming ██(b) (6)██ jfranklin ██(b) (6)██ john.wack ██(b) (6)██ kathy.rogers ██(b) (6)██
kay.stimson ██(b) (6)██ mary.brady ██(b) (6)██ matt ██(b) (6)██ ;
mcoutts ██(b) (6)██ ; mharrington@eac.gov; michael.walker ██(b) (6)██
msantos ██(b) (6)██ ; mturner ██(b) (6)██ oletts ██(b) (6)██ ; patricia.wilburg ██(b) (6)██
paumayr ██(b) (6)██ ██(b) (6)██ ; sderheimer ██(b) (6)██
sharon.laskowski ██(b) (6)██ smpearson ██(b) (6)██ tjhallett ██(b) (6)██
██(b) (6)██ wendy.owens ██(b) (6)██ ; Jerome Lovato<jlovato@eac.gov>

Subject: VVSG 2.0 Implementation Working Group Agenda for 7/24

Good afternoon,

This call will focus on finishing Principle 1: Guidelines 2 and 3, and starting Principle 2: Guideline 1 (time permitting).
Please let me know if you did not receive the spreadsheet of comments that Jerome distributed.

Please note the update Zoom information

Join Zoom Meeting

https://eac-gov.zoom.us/j/3061905854?pwd=UVY4bjAwN3A0SnZlb09jV1BLSERxZz09

Meeting ID: 306 190 5854

Passcode: ██(b) (6)██

One tap mobile

+13126266799,,3061905854# US (Chicago)

+19292056099,,3061905854# US (New York)

Dial by your location

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 669 900 6833 US (San Jose)

877 853 5247 US Toll-free

888 788 0099 US Toll-free

Maurice Turner

Senior Advisor
U.S. Election Assistance Commission
(b) (6) ██████████ | www.eac.gov

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Friday, June 19, 2020 4:38:07 PM
To: Mona Harrington<mharrington@eac.gov>; Paul Aumayr (b) (6) Eugene Burton (b) (6) Jessica Fleming (b) (6) ; Danielle Munoz (b) (6) ; Olivia Letts (b) (6) ; Jessica Bowers (b) (6) ; Joshua Franklin (b) (6) ; Mary C. Brady (b) (6) ; Amanda Joiner (b) (6)
Subject: EAC VVSG 2.0 Implementation Working Group Doodle Poll

Hi All,

Here is the link to the Doodle Poll for our weekly meetings starting next Friday, June 26th.
https://doodle.com/poll/2pm7q6fgkyis6a26

I look forward to working with you!

Jerome Lovato
Director, Voting System Testing and Certification
U.S. Election Assistance Commission
Ph. 202-805-4613

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Friday, June 26, 2020 2:46:51 PM
To: Traci Mapps< (b) (6) ███████████████>
Subject: Re: Invitation: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly from 1pm to 2pm on Friday from Fri Jun 26 to Fri Oct 16 (EDT) (b) (6) ███████████

Hi Traci,

Yes, we are still meeting. I plan on joiningthe conference after our meeting.

Thanks for checking.

Jerome

On Fri, Jun 26, 2020 at 10:17 AM Traci Mapps < (b) (6) █████████████████ wrote:

> Jerome,
>
> Today's meeting conflicts with the State Cert Virtual Conference. I'm just wondering if we're still meeting.
>
> Probably only impacts a few of us but just thought I'd ask.
>
> Thanks,
>
> Traci
>
>
> **Traci Mapps** ISTQB® CTFL
>
> (████████████████
> b
>) ██████████████
> (██████████████
> 6)
>
>
> *SLI Compliance "A Division of GLI LLC."*
>
>
> -----Original Appointment-----
> **From:** jlovato@eac.gov <jlovato@eac.gov>
> **Sent:** Monday, June 22, 2020 7:41 PM
> **To:** jlovato@eac.gov; mcoutts (b) (6) ██████████ michael.walker (b) (6) ██████ Michael Santos; eburton (b) (6) ██████ ajoiner (b) (6) ██████ gwenyth.winship (b) (6) ████████ edwin.smith (b) (6) ███████; zshaw (b) (6) ██████; ian.piper (b) (6) ██████; mharrington@eac.gov; jack.cobb (b) (6) ██████; russ.dawson (b) (6) █████; jfranklin@eac.gov; cortiz (b) (6) ████████; kathy.rogers (b) (6) █████████

ginnyb **(b) (6)** wendy.owens **(b) (6)** matt **(b) (6)** ; bhirsch **(b) (6)**
jbowers **(b) (6)** ; paumavr **(b) (6)** ben **(b) (6)** oletts **(b) (6)** mturner **(b) (6)**
aaron.wilson **(b) (6)** Traci Mapps; dmunoz **(b) (6)** smpearson **(b) (6)**
kay.stimson **(b) (6)** sderheimer **(b) (6)** mary.brady **(b) (6)** jfleming **(b) (6)**
jcanter **(b) (6)**

Subject: Invitation: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly from 1pm to 2pm on Friday from Fri Jun 26 to Fri Oct 16 (EDT) **(b) (6)**

When: Friday, June 26, 2020 1:00 PM-2:00 PM America/New_York.

Where: https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09

You have been invited to the following event.

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Weekly from 1pm to 2pm on Friday from Fri Jun 26 to Fri Oct 16 Eastern Time - New York
Where	https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (m
Calendar	tmapps **(b) (6)**
Who	

- jlovato@eac.gov - organizer

- mcoutts **(b) (6)**

- michael.walker **(b) (6)**

- msantos **(b) (6)**

- eburton **(b) (6)**

- ajoiner **(b) (6)**

- gwenyth.winship **(b) (6)**

- edwin.smith **(b) (6)**

EAC-0217

- zshaw[REDACTED (b) (6)]

- ian.piper[REDACTED (b) (6)].

- mharrington@eac.gov

- jack.cobb[REDACTED (b) (6)]

- [REDACTED (b) (6)]

- jfranklin[REDACTED (b) (6)]

- cortiz[REDACTED (b) (6)]

- kathy.rogers[REDACTED (b) (6)]

- ginnyb[REDACTED (b) (6)].

- wendy.owens[REDACTED (b) (6)]

- matt[REDACTED (b) (6)]

- bhirsch[REDACTED (b) (6)].

- jbowers[REDACTED (b) (6)]

- paumayr[REDACTED (b) (6)]

- ben[REDACTED (b) (6)].

- oletts[REDACTED (b) (6)]

- mturner (b) (6)

- aaron.wilson (b) (6)

- (b) (6)

- dmunoz (b) (6)

- smpearson (b) (6)

- kay.stimson (b) (6)

- sderheimer (b) (6)

- mary.brady (b) (6)

- jfleming (b) (6)

- jcanter (b) (6)

more details »

Jerome Lovato is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09

Meeting ID: 885 3645 1488

Password: (b) (6)

One tap mobile

+12532158782,,88536451488# US (Tacoma)

+13462487799,,88536451488# US (Houston)

Dial by your location

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 301 715 8592 US (Germantown)

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

877 853 5247 US Toll-free

888 788 0099 US Toll-free

Meeting ID: 885 3645 1488

Find your local number: https://us02web.zoom.us/u/kbZZnXFAUV

Going (b) (6) ██████████████ All events in this series: **Yes** - **Maybe** - **No** more options »

EAC-0221

From: Zoom<no-reply@zoom.us>
Sent on: Friday, June 26, 2020 5:58:02 PM
To: jlovato@eac.gov
Subject: Cloud Recording - VVSG 2.0 Implementation Working Group Weekly Meeting is now available

Hi Jerome Lovato,

Your cloud recording is now available.

Topic: VVSG 2.0 Implementation Working Group Weekly Meeting
Date: Jun 26, 2020 12:52 PM Eastern Time (US and Canada)

For host only, click here to view your recording (Viewers cannot access this page):
https://us02web.zoom.us/recording/ (b) (6)

Share recording with viewers:
https://us02web.zoom.us/rec (b) (6)
Password: (b) (6)

Thank you for choosing Zoom.
-The Zoom Team

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Monday, June 29, 2020 1:19:06 PM
To: Mona Harrington<mharrington@eac.gov>
Subject: VVSG 2.0 Implementation Working Group recording

Good morningMona,

Here is the recording of Friday's meeting:
https://us02web.zoom.us/ (b) (6)

Password: (b) (6)

Jerome
--
Jerome Lovato
Director, Voting System Testing and Certification
U.S. Election Assistance Commission
Ph. 202-805-4613

From: <jlovato@eac.gov>
Sent on: Wednesday, June 24, 2020 4:07:14 PM
To: mcoutts (b) (6) eburton (b) (6) v; ajoiner (b) (6) gwenyth.winship (b) (6); zshaw (b) (6) mharrington@eac.gov; jack.cobb (b) (6) (b) (6) jfranklin (b) (6); ginnyb (b) (6) mat (b) (6) bhirsch (b) (6); jbowers (b) (6) paumayr (b) (6) ben (b) (6); oletts (b) (6) mturner (b) (6) dmunoz (b) (6) smpearson (b) (6); mary.brady (b) (6) jfleming (b) (6); michael.walker (b) (6); msantos (b) (6); edwin.smith (b) (6); ian.piper (b) (6); cortiz (b) (6); kathy.rogers (b) (6) wendy.owens (b) (6) aaron.wilson (b) (6) kay.stimson (b) (6) sderheimer (b) (6) jcanter (b) (6) Edwin Smith< (b) (6)
Subject: Canceled event with note: VVSG 2.0 Implementation Working Group Weekly Meeting @ Fri Jul 3, 2020 1pm - 2pm (EDT) (eburton (b) (6)
Attachments: invite.ics (6.63 KB)

This event has been canceled and removed from your calendar with this note:
"Canceling this meeting since it is a holiday."

VVSG 2.0 Implementation Working Group Weekly Meeting

When   Fri Jul 3, 2020 1pm – 2pm Eastern Time - New York

Where   https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (map)

Calendar   eburton (b) (6)

Who
- jlovato@eac.gov
  - *organizer*
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington (b) (6)
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- mat (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben (b) (6)
- oletts (b) (6)
- mturner (b) (6)
- dmunoz (b) (6)
- smpearson (b) (6)

EAC-0224

- mary.brady (b) (6)
- jfleming (b) (6)
- michael.walke (b) (6)
- msantos (b) (6)
- edwin.smith (b) (6)
- ian.pipe (b) (6)
- cortiz (b) (6)
- kathy.rogers (b) (6)
- wendy.owens (b) (6)
- aaron.wilson (b) (6)
- tmapps (b) (6)
- kay.stimson (b) (6)
- sderheimer (b) (6)
- jcanter (b) (6)
- Edwin Smith

Jerome Lovato is inviting you to a scheduled Zoom meeting.

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Thursday, July 9, 2020 9:12:34 PM
To: Mona Harrington<mharrington@eac.gov>
CC: Joshua Franklin (b) (6)   Jessica Bowers (b) (6)   Maurice Turner (b) (6)
Subject: Agenda for the July 10th working group call
Attachments: EAC VVSG 2.0 Implementation Working Group Agenda - July 10, 2020.docx (15.08 KB)

Hi Mona,

Attached is the agenda for tomorrow's call. I want to run it by you before distributing to the group. (b) (5)

Please let me know if you have any feedback.

Thank you,
Jerome

1. Roll call
2. Review test assertions for Requirements: 1.2-A – Assessment of accuracy, 1.2-C – Ballot position distribution, and 1.2-D – Mark quality

Test Assertions

VVSG 2.0 Section	Title	Requirement	Discussion	Test Assertion
1.2-A	Assessment of accuracy	The voting system's accuracy must be assessed by using a combination of evidence items gathered during the entire course of testing, including: 1. A measurement of how accurately voter marks are recognized as valid or not valid according to manufacturer specifications. 2. A measurement of how accurately voter marks are tabulated and reported as results. 3. An assessment of whether the remaining VVSG requirements are satisfied.	A voting system cannot be determined as accurate without some uncertainty; thus, a judgement must be made based on evidence. In this case, a volume test is used under real-world conditions, and evidence collected throughout the test campaign as to whether the voting system satisfies all other relevant VVSG requirements.	
1.2-C	Ballot position distribution	The ballot positions must be spread across devices according to a typical volume per device in a typical election.	The test lab determines the typical volume per device and then spreads the number of ballot positions to be tested accordingly across the devices, for example, 10% to the ballot marking device (BMD), 40% to the voter facing scanner, etc.	
1.2-D	Mark quality	For devices that read and interpret human-made marks on ballots, the mark quality of the marks must be spread across the manufacturer's published specifications for valid marks and invalid marks according to expected distributions in typical elections.	The goal of this requirement is to model real-world conditions. The test lab would prepare, using the manufacturer's specifications for valid marks, a set of test ballots in which mark quality will vary as it would in typical elections. In the case of marks that are borderline valid or invalid, a	

VVSG 2.0 Section	Title	Requirement	Discussion	Test Assertion
			scanner may flag the marks as requiring adjudication.	

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Friday, July 10, 2020 7:26:22 PM
To: Mona Harrington<mharrington@eac.gov>
Subject: Fwd: Cloud Recording - VVSG 2.0 Implementation Working Group Weekly Meeting is now available

Here is the recording for today's meeting.

---------- Forwarded message ---------
From: **Zoom** <no-reply@zoom.us>
Date: Fri, Jul 10, 2020 at 2:14 PM
Subject: Cloud Recording - VVSG 2.0 Implementation Working Group Weekly Meeting is now available
To: <jlovato@eac.gov>

Hi Jerome Lovato,

Your cloud recording is now available.

Topic: VVSG 2.0 Implementation Working Group Weekly Meeting
Date: Jul 10, 2020 12:52 PM Eastern Time (US and Canada)

For host only, click here to view your recording (Viewers cannot access this page):
https://us02web.zoom.us/ (b) (6)

Share recording with viewers:
https://us02web.zoom.us/ (b) (6)

assword:

Thank you for choosing Zoom.
-The Zoom Team

From: Jessica Bowers (b) (6)

Sent on: Wednesday, July 15, 2020 6:33:02 PM

To: Jerome Lovato<jlovato@eac.gov>

Subject: FW: draft agenda for Friday's telecon

Attachments: VVSG 2 Implementation WG Agenda 07-17-2020.pdf (77.06 KB), VVSG 2 Implementation WG Agenda 07-17-2020.docx (14.47 KB)

(b) (5)

From: Wack, John P. (Ctr) (b) (6)
Sent: Wednesday, July 15, 2020 12:27 PM
To: Brady, Mary C. (Fed) <(b) (6)   Jessica Bowers (b) (6)
Subject: Re: draft agenda for Friday's telecon

(b) (5)

Thanks, John

--

John P. Wack

(b) (6)

From: "Brady, Mary C. (Fed)" (b) (6)
Date: Wednesday, July 15, 2020 at 2:21 PM
To: "Wack, John P. (Ctr)" (b) (6)   Jessica Bowers (b) (6)
Subject: Re: draft agenda for Friday's telecon

(b) (5)

Mary

From: "Wack, John P. (Ctr)" (b) (6)
Date: Wednesday, July 15, 2020 at 2:13 PM
To: Jessica Bowers (b) (6)   "Brady, Mary C. (Fed)" (b) (6)
Subject: Re: draft agenda for Friday's telecon

(b) (5)

Cheers, John

--

John P. Wack

(b) (6)

From: Jessica Bowers (b) (6)   >
Date: Wednesday, July 15, 2020 at 1:53 PM
To: "Wack, John P. (Ctr)" (b) (6)   , "Brady, Mary C. (Fed)" (b) (6)
Subject: RE: draft agenda for Friday's telecon

Hi John,

(b) (5)

[REDACTED (b) (5)]

Thanks,
Jessica

Hi Jessica, [REDACTED (b) (5)]

[REDACTED (b) (5)]

Cheers, John

--
John P. Wack
[REDACTED (b) (6)]

+ Jessica Bowers

Jessica,

[REDACTED (b) (5)]

Mary

Hi Mary,

[REDACTED (b) (5)]

Cheers, John
--

John P. Wack

Confidential Notice: This message may contain Controlled Unclassified Information (CUI) that requires safeguarding or dissemination control under applicable law, regulation, or Government-wide policy. This email, including all attachments, may constitute a Federal record or other Government property that is intended only for the use of the individual or entity to which it is addressed. If you are not the intended recipient or the employee or agent responsible for delivering the transmission to the intended recipient, you are hereby notified that any dissemination, distribution, copying or use of this email or its contents is strictly prohibited. If you have received this email in error, please notify the sender by responding to the email and then immediately delete the email.

Agenda for VVSG 2.0 Implementation Working Group Telecon
July 17, 2020

Focus for this meeting is on the requirements in Principle 1, Guideline 1 and, if there is time, Guidelines 2 and 3. These are the major functional requirements for voting systems and, in some cases, certain devices within the voting system. Most of the requirements can be tested via demonstration and test cases are not necessarily needed. The intention of this telecon is to address major themes in the comments as opposed to each and every comment.

The requirements in P1.1 are largely inherited from the 2007 TGDC Recommendations, which themselves were reorganizations of similar requirements spread throughout VVSG 1.0. There are currently organized into the following sections:

- Election definition
- Equipment setup
- Opening the polls
- Ballot activation
- Casting
- Recording voter choices and ballot handling
- Closing the polls
- Tabulation
- Reporting

Major themes in the comments include:

1. Manner in which the requirements are written, including making them clearer. We can go over several examples but there is no need to address them all.

2. Common data formats and requiring them within the voting system.

3. L&A testing and whether a different method for testing election setup is preferred.

4. Requirements that may needlessly prevent some voting system operations or reflect a non-understanding of election needs.

The telecon will focus on these major themes and address the relevant requirements accordingly.

From: Maurice Turner<mturner(b) (6)

Sent on: Thursday, July 16, 2020 9:20:13 PM

To: aaron.wilson(b) (6) ajoiner(b) (6) ; aregenscheid(b) (6) ben(b) (6) bhirsch(b) (6) cortiz(b) (6) dmunoz(b) (6) eburton(b) (6) edwin.smith(b) (6) ; ginnyb(b) (6) ; gwenyth.winship(b) (6) ian.piper(b) (6) ; jack.cobb(b) (6) jbowers(b) (6) jcanter(b) (6) jfleming(b) (6) jfranklin(b) (6) ; john.wack(b) (6) kathy.rogers(b) (6) ; kay.stimson(b) (6) mary.brady(b) (6) matt(b) (6) mcoutts(b) (6) ; mharrington@eac.gov; michael.walker(b) (6) msantos(b) (6) ; mturner(b) (6) oletts(b) (6) patricia.wilburg(b) (6) paumayr(b) (6) russ.dawson(b) (6) sderheimer(b) (6) ; sharon.laskowski(b) (6) ; smpearson(b) (6) tjhallet(b) (6) tmapps(b) (6) ; wendy.owens(b) (6)

Subject: VVSG 2.0 Implementation Working Group Agenda for 7/17

Attachments: VVSG 2 Implementation WG Agenda 07-17-2020.pdf (77.06 KB)

Good afternoon,

The agenda for the upcoming meeting is attached. This call will focus on four major themes from the public comments and the relevant requirements in Principle 1, Guideline 1, and Guidelines 2 and 3 (time permitting).

Join Zoom Meeting

https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09

Meeting ID: 885 3645 1488

Password: (b) (6)

One tap mobile

+12532158782,,88536451488# US (Tacoma)

+13462487799,,88536451488# US (Houston)

Maurice Turner
Senior Advisor
U.S. Election Assistance Commission
mturner(b) (6) www.eac.gov

<<...>>

Agenda for VVSG 2.0 Implementation Working Group Telecon
July 17, 2020

Focus for this meeting is on the requirements in Principle 1, Guideline 1 and, if there is time, Guidelines 2 and 3. These are the major functional requirements for voting systems and, in some cases, certain devices within the voting system. Most of the requirements can be tested via demonstration and test cases are not necessarily needed. The intention of this telecon is to address major themes in the comments as opposed to each and every comment.

The requirements in P1.1 are largely inherited from the 2007 TGDC Recommendations, which themselves were reorganizations of similar requirements spread throughout VVSG 1.0. There are currently organized into the following sections:

- Election definition
- Equipment setup
- Opening the polls
- Ballot activation
- Casting
- Recording voter choices and ballot handling
- Closing the polls
- Tabulation
- Reporting

Major themes in the comments include:

1. Manner in which the requirements are written, including making them clearer. We can go over several examples but there is no need to address them all.

2. Common data formats and requiring them within the voting system.

3. L&A testing and whether a different method for testing election setup is preferred.

4. Requirements that may needlessly prevent some voting system operations or reflect a non-understanding of election needs.

The telecon will focus on these major themes and address the relevant requirements accordingly.

From: <jlovato@eac.gov>
Sent on: Friday, July 24, 2020 3:12:01 PM
To: mcoutts(b) (6) ; eburton(b) (6) ajoiner(b) (6) gwenyth.winship(b) (6) ; zshaw(b) (6) ; mharrington@eac.gov; jack.cobb(b) (6) ; russ.dawson(b) (6) ; jfranklin(b) (6) ginnyb(b) (6) ; mat(b) (6) bhirsch(b) (6) ; jbowers(b) (6) ; paumayr(b) (6) ; ben(b) (6) ; oletts(b) (6) ; mturner(b) (6) dmunoz(b) (6) ; smpearson(b) (6) ; mary.brady(b) (6) ; jfleming(b) (6) ; Laskowski, Sharon J. Dr. (Fed)(b) (6) ; Wack, John P. (Ctr)(b) (6) ; aregenscheid(b) (6) michael.walker(b) (6) ; msantos(b) (6) edwin.smith(b) (6) ian.piper(b) (6) ; cortiz(b) (6) ; kathy.rogers(b) (6) ; wendy.owens(b) (6) aaron.wilson(b) (6) ; tmapps(b) (6) ; kay.stimson(b) (6) sderheimer(b) (6) jcanter(b) (6) ; Edwin Smith<(b) (6) ; Wilburg, Patricia (Fed)(b) (6) ; Hallett, Tim(b) (6) ; Richbourg, Paige(b) (6)
Subject: Updated invitation: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly from 1pm to 2pm on Friday from Fri Jul 24 to Thu Jul 30 (EDT) (jfranklin(b) (6)
Attachments: invite.ics (8.13 KB)

This event has been changed.

VVSG 2.0 Implementation Working Group Weekly Meeting

When   Weekly from 1pm to 2pm on Friday from Fri Jul 24 to Thu Jul 30 Eastern Time - New York

Calendar   jfranklin(b) (6)

Who
- jlovato@eac.gov
  - organizer
- mcoutts(b) (6)
- eburton(b) (6)
- ajoiner(b) (6)
- gwenyth.winship(b) (6)
- zshaw(b) (6)
- mharrington@eac.gov
- jack.cobb(b) (6)
- russ.dawson(b) (6)
- jfranklin(b) (6)
- ginnyb(b) (6)
- mat(b) (6)
- bhirsch(b) (6)
- jbowers(b) (6)
- paumayr(b) (6)
- ben(b) (6)
- oletts(b) (6)
- mturne(b) (6)
- dmunoz(b) (6)
- smpearson(b) (6)

- mary.brady(b) (6)
- jfleming(b) (6)
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid(b) (6)
- michael.walker(b) (6)
- msantos(b) (6)
- edwin.smith(b) (6)
- ian.pipe(b) (6)
- cortiz(b) (6)
- kathy.rogers(b) (6)
- wendy.owens(b) (6)
- aaron.wilson(b) (6)
- tmapps(b) (6)
- kay.stimson(b) (6)
- sderheimer(b) (6)
- jcanter(b) (6)
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

more details »
Join Zoom Meeting

Going (jfranklin(b) (6))?All events in this series:
Yes -
Maybe -
Nomore options »

From: Maurice Turner<(b) (6)

Sent on: Friday, July 24, 2020 5:07:01 PM

To: aaron.wilson(b) (6); ajoiner(b) (6); aregenscheid(b) (6); ben(b) (6) bhirsch(b) (6); cortiz(b) (6); dmunoz(b) (6) eburton(b) (6) edwin.smith(b) (6) ginnyb(b) (6) gwenyth.winship(b) (6); Ian Piper(b) (6)>; jack.cobb(b) (6) jbowers(b) (6) jcanter(b) (6); jfleming(b) (6) jfranklin(b) (6) john.wack(b) (6) kathy.rogers(b) (6); Kay Stimson<k(b) (6); mary.brady(b) (6) matt(b) (6); mcoutts(b) (6); mharrington@eac.gov; michael.walker(b) (6); msantos(b) (6) mturner(b) (6) oletts(b) (6) patricia.wilburg(b) (6) paumayr(b) (6) russ.dawson(b) (6) sderheimer(b) (6) sharon.laskowski(b) (6) smpearson(b) (6) tjhallett(b) (6); tmapps(b) (6) wendy.owens(b) (6) Jerome Lovato<jlovato@eac.gov>

Subject: Updated Zoom Information for VVSG 2.0 Implementation Working Group for 7/24

Please note the update Zoom information

Join Zoom Meeting

https://eac-gov.zoom.us/j/3061905854?pwd=UVY4bjAwN3A0SnZlb09jV1BLSERxZz09

Meeting ID: 306 190 5854

Passcode (b) (6)

One tap mobile

+13126266799,,3061905854# US (Chicago)

+19292056099,,3061905854# US (New York)

Dial by your location

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 669 900 6833 US (San Jose)

877 853 5247 US Toll-free

Maurice Turner
Senior Advisor
U.S. Election Assistance Commission
(b) (6) v | www.eac.gov

From: Maurice Turner< (b) (6)

Sent on: Friday, July 24, 2020 5:18:51 PM

To: Ian Piper (b) (6) >

CC: Jerome Lovato (JLovato@eac.gov)<Jerome Lovato (JLovato@eac.gov)>

Subject: Re: Meeting Notification

Thanks for noticing the issue. We'll get that taken care of immediately.

Maurice Turner

Senior Advisor

U.S. Election Assistance Commission

mturner((b) (6) www.eac.gov

From: Ian Piper (b) (6)

Sent: Friday, July 24, 2020 1:17:19 PM

To: Maurice Turner (b) (6)

Cc: Jerome Lovato (JLovato@eac.gov) <JLovato@eac.gov>

Subject: Meeting Notification

Maurice:

There was confusion in the meeting notification. Under the "Where" header, it has the old URL.

The new URL is further below. I've highlighted both of them in YELLOW in a copy of the meeting notice below. After this meeting, you might want to get both of those links in sync.

Sincerely:

IAN S. PIPER | CERTIFICATION DIRECTOR

DOMINION VOTING SYSTEMS, INC.

1201 18th Street, Suite 210, DENVER, CO 80202

866-654-VOTE (8683)| DOMINIONVOTING.COM

(b) (6)

This event has been changed.

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Fri Jul 24, 2020 1pm – 2pm Eastern Time - New York
Where	https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (map
Calendar	ian.piper (b) (6)
Who	• jlovato@eac.gov - organizer
	• mcoutts (b) (6)
	• eburton (b) (6)
	• ajoiner (b) (6)
	• gwenyth.winship (b) (6)
	• zshaw (b) (6)
	• mharrington@eac.gov
	• jack.cobb (b) (6)
	• russ.dawson (b) (6)
	• jfranklin (b) (6)
	• ginnyb (b) (6)
	• matt (b) (6)
	• bhirsch (b) (6)
	• jbowers (b) (6)
	• paumayr (b) (6)
	• ben@ (b) (6)
	• oletts (b) (6)
	• mturner (b) (6)
	• dmunoz (b) (6)
	• smpearson (b) (6)
	• mary.brady (b) (6)
	• jfleming@ (b) (6)

- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheio (b) (6)
- michael.walker (b) (6)
- msantos@ (b) (6)
- edwin.smith (b) (6)
- ian.piper (b) (6)
- cortiz (b) (6)
- kathy.rogers (b) (6)
- wendy.owens (b) (6)
- aaron.wilson (b) (6)
- tmapps (b) (6)
- kay.stimson (b) (6)
- sderheimer (b) (6)
- jcanter (b) (6)
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

more details »

Changed: Join Zoom Meeting

https://eac-gov.zoom.us/j/3061905854?pwd=UVY4bjAwN3A0SnZlb09jV1BLSERxZz09

Meeting ID: 306 190 5854

Passcode: (b) (6)

One tap mobile

+13126266799,,3061905854# US (Chicago)

+19292056099,,3061905854# US (New York)

Dial by your location

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 669 900 6833 US (San Jose)

877 853 5247 US Toll-free

888 788 0099 US Toll-free

Meeting ID: 306 190 5854

Find your local number: https://eac-gov.zoom.us/u/kdZogWnSjg

Going (ian.piper@ (b) (6))?**Yes** - **Maybe** - **No**more options »

EAC-0241

From: <mturner (b) (6)

Sent on: Wednesday, July 29, 2020 1:51:54 PM

To: mcoutts (b) (6) ; eburton (b) (6) jlovato@eac.gov; ajoiner (b) (6) gwenyth.winship (b) (6) ; zshaw (b) (6) v; mharrington@eac.gov; jack.cobb (b) (6) russ.dawson (b) (b) jfranklin (b) (6) ginnyb (b) (6) ; mat (b) (6) bhirsch (b) (6) ; jbowers (b) (6) paumayr (b) (6) ben (b) (6) oletts (b) (6) dmunoz (b) (6) ; smpearson (b) (6) mary.brady (b) (6) ; jfleming (b) (6) Laskowski, Sharon J. Dr. (Fed) (b) (6) Wack, John P. (Ctr)< (b) (6) aregenscheid (b) (6) Howell, Gema E. (Fed)< (b) (6) >; Carnahan, Lisa J. (Fed) (b) (6) >; michael.walker (b) (6) ; msantos (b) (6) ; edwin.smith (b) (6) ian.piper (b) (6) ; cortiz (b) (6) ; kathy.rogers (b) (6) wendy.owens (b) (6) aaron.wilson (b) (6) tmapps (b) (6) ; kay.stimson (b) (6) ; sderheimer (b) (6) jcanter (b) (6) ; Edwin Smith (b) (6) ; Wilburg, Patricia (Fed) (b) (6) Hallett, Tim (b) (6) >; Richbourg, Paige< (b) (6)

Subject: Canceled event with note: VVSG 2.0 Implementation Working Group Weekly Meeting @ Fri Jul 31, 2020 1pm - 2pm (EDT) (jfleming (b) (6)

Attachments: invite.ics (7.55 KB)

This event has been canceled and removed from your calendar with this note:

"Due to the EAC Standards Board hearing this Friday, which requires the involvement of NIST and EAC staff, this Friday's Implementation Working Group call is canceled. Next week's call will occur as scheduled."

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Fri Jul 31, 2020 1pm – 2pm Eastern Time - New York
Calendar	jfleming (b) (6)
Who	

- mturne (b) (6) - organizer
- jlovato@eac.gov - creator
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington@eac.gov
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- mat (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben (b) (6)

- bob (b) (6)
- oletts (b) (6)
- dmunoz (b) (6)
- smpearson (b) (6)
- mary.brady (b) (6)
- jfleming (b) (6)
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid (b) (6)
- Howell, Gema E. (Fed)
- Carnahan, Lisa J. (Fed)
- michael.walke (b) (6)
- msantos (b) (6)
- edwin.smith (b) (6)
- ian.pipe (b) (6)
- cortiz (b) (6)
- kathy.rogers (b) (6)
- wendy.owens (b) (6)
- aaron.wilson (b) (6)
- tmapps (b) (6)
- kay.stimson (b) (6)
- sderheimer (b) (6)
- jcanter (b) (6)
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

Join Zoom Meeting

EAC-0244

From: <jlovato@eac.gov>

Sent on: Thursday, July 23, 2020 7:44:31 PM

To: mcoutts (b) (6) ; eburton (b) (6) ajoiner (b) (6) gwenyth.winship (b) (6) zshaw (b) (6) mharrington@eac.gov; jack.cobb (b) (6) russ.dawson (b) (6) jfranklin (b) (6) ginnyb (b) (6) ; mat (b) (6) bhirsch (b) (6) jbowers (b) (6) paumayr (b) (6) ben (b) (6) ; oletts (b) (6) mturner (b) (6) dmunoz (b) (6) ; smpearson (b) (6) mary.brady (b) (6) jfleming (b) (6) Laskowski, Sharon J. Dr. (Fed) (b) (6) ; Wack, John P. (Ctr)<john.wack (b) (6) aregenscheid (b) (6) ; michael.walker (b) (6) msantos (b) (6) edwin.smith (b) (6) ian.piper (b) (6) ; cortiz (b) (6) kathy.rogers (b) (6) wendy.owens (b) (6) aaron.wilson (b) (6) (b) (6) kay.stimson((b) (6) sderheimer (b) (6) jcanter (b) (6) Edwin Smith (b) (6) Wilburg, Patricia (Fed)< (b) (6) Hallett, Tim (b) (6) ; Richbourg, Paige (b) (6)

Subject: Updated invitation with note: VVSG 2.0 Implementation Working Group Weekly Meeting @ Weekly from 1pm to 2pm on Friday from Fri Jul 31 to Fri Oct 16 (EDT) (ajoiner (b) (6))

Attachments: invite.ics (8.63 KB)

This event has been changed with this note:

"I updated the Zoom link for our weekly meetings."

VVSG 2.0 Implementation Working Group Weekly Meeting

When   Weekly from 1pm to 2pm on Friday from Fri Jul 31 to Fri Oct 16 Eastern Time - New York

Where   https://us02web.zoom.us/j/88536451488?pwd=OWNjcDBaVkJ1L2pjMDY2WFdaZ3R1QT09 (map)

Calendar ajoine (b) (6)

Who
- jlovato@eac.gov
  - organizer
- mcoutts (b) (6)
- eburton (b) (6)
- ajoiner (b) (6)
- gwenyth.winship (b) (6)
- zshaw (b) (6)
- mharrington (b) (6)
- jack.cobb (b) (6)
- russ.dawson (b) (6)
- jfranklin (b) (6)
- ginnyb (b) (6)
- mat (b) (6)
- bhirsch (b) (6)
- jbowers (b) (6)
- paumayr (b) (6)
- ben (b) (6)
- oletts (b) (6)
- mturne (b) (6)

- dmunoz(b) (6) ██████
- smpearson(b) (6) ████████
- mary.brady(b) (6) ██████
- jfleming(b) (6) ██████
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid(b) (6) ████████
- michael.walke (b) (6) ████████
- msantos(b) (6) ████████
- edwin.smith(b) (6) ████████
- ian.pipe (b) (6) ████████
- cortiz(b) (6) ██████
- kathy.rogers(b) (6) ██████
- wendy.owens(b) (6) ████████
- aaron.wilson(b) (6) ██████
- tmapps(b) (6) ██████
- kay.stimson(b) (6) ██████████
- sderheimer(b) (6) ██████
- jcanter(b) (6) ██████
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

[more details »](#)
Changed:

Going (ajoiner(b) (6) ████ ?All events in this series:
Yes -
Maybe -
No[more options »](#)

EAC-0246

Invitation from Google Calendar

You are receiving this email at the account ajoine (b) (6) because you are subscribed for updated invitations on calendar
ajoine (b) (6)

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: Maurice Turner (b) (6)
Sent on: Thursday, August 6, 2020 8:18:20 PM
To: aaron.wilson (b) (6) ; ajoiner (b) (6) ; aregenscheid (b) (6) ; ben (b) (6) bhirsch (b) (6) ; cortiz (b) (6) dmunoz (b) (6) eburton (b) (6) edwin.smith (b) (6) ; ginnyb (b) (6) gwenyth.winship (b) (6) ian.piper (b) (6) ; jack.cobb (b) (6) jbowers (b) (6) jcanter (b) (6) jfleming (b) (6) jfranklin (b) (6) john.wack (b) (6) kathy.rogers (b) (6) kay.stimson (b) (6) mary.brady (b) (6) ; matt (b) (6) mcoutts (b) (6) ; mharrington@eac.gov; michael.walker (b) (6) msantos (b) (6) ; mturner (b) (6) ; oletts (b) (6) ; patricia.wilburg (b) (6) paumayr (b) (6) ; russ.dawson (b) (6) sderheimer (b) (6) sharon.laskowski (b) (6) smpearson (b) (6) ; tjhallett (b) (6) ; tmapps (b) (6) wendy.owens (b) (6) ; Jerome Lovato<jlovato@eac.gov>
Subject: Canceled: VVSG 2.0 Implementation Working Group Meeting for 8/7

Unfortunately, tomorrow's meeting is canceled. We are considering some of the issues that have been raised and re-evaluating the format of the discussion group. Thank you for your contributions thus far.

Maurice Turner
Senior Advisor
U.S. Election Assistance Commission
mturner (b) (6) | www.eac.gov

From: <mturner(b) (6)

Sent on: Friday, August 7, 2020 1:40:13 PM

To: mcoutts(b) (6); eburton(b) (6); jlovato@eac.gov; ajoiner(b) (6); gwenyth.winship(b) (6); zshaw(b) (6) mharrington@eac.gov; jack.cobb(b) (6); russ.dawson(b) (6); jfranklin(b) (6); ginnyb(b) (6); mat(b) (6); bhirsch(b) (6); jbowers(b) (6); paumayr(b) (6); ben(b) (6) oletts(b) (6) dmunoz(b) (6); smpearson(b) (6); mary.brady(b) (6); jfleming(b) (6) Laskowski, Sharon J. Dr. (Fed)(b) (6)>; Wack, John P. (Ctr)(b) (6); aregenscheid(b) (6); Howell, Gema E. (Fed)<(b) (6)>; Carnahan, Lisa J. (Fed)(b) (6); Kevin Rayburn<krayburn@eac.gov>; michael.walker(b) (6); msantos(b) (6); edwin.smith(b) (6); ian.piper(b) (6); cortiz(b) (6) kathy.rogers(b) (6); wendy.owens(b) (6); aaron.wilson(b) (6) tmapps(b) (6); kay.stimson(b) (6) sderheimer(b) (6) jcanter(b) (6); Edwin Smith<(b) (6)>; Wilburg, Patricia (Fed)(b) (6); Hallett, Tim(b) (6); Richbourg, Paige(b) (6)

Subject: Canceled event: VVSG 2.0 Implementation Working Group Weekly Meeting @ Fri Aug 7, 2020 1pm - 2pm (EDT) (eburton@eac.gov)

Attachments: invite.ics (8.14 KB)

This event has been canceled and removed from your calendar.

VVSG 2.0 Implementation Working Group Weekly Meeting

When	Fri Aug 7, 2020 1pm – 2pm Eastern Time - New York
Calendar	eburton(b) (6)
Who	

- mturne(b) (6)
  - organizer
- mcoutts(b) (6)
- eburton(b) (6)
- jlovato@eac.gov
- ajoiner(b) (6)
- gwenyth.winship(b) (6)
- zshaw(b) (6)
- mharrington@eac.gov
- jack.cobb(b) (6)
- russ.dawson(b) (6)
- jfranklin(b) (6)
- ginnyb(b) (6)
- mat(b) (6)
- bhirsch(b) (6)
- jbowers(b) (6)
- paumayr(b) (6)
- ben(b) (6)
- oletts(b) (6)
- dmunoz(b) (6)

- smpearson(b) (6) ███████
- mary.brady(b) (6) ███
- jfleming(b) (6) ██
- Laskowski, Sharon J. Dr. (Fed)
- Wack, John P. (Ctr)
- aregenscheid(b) (6) ████
- Howell, Gema E. (Fed)
- Carnahan, Lisa J. (Fed)
- Kevin Rayburn
- michael.walke(b) (6) █████
- msantos(b) (6) ████
- edwin.smith(b) (6) ████
- ian.pipe(b) (6) ████
- cortiz(b) (6) ███
- kathy.rogers(b) (6) ██
- wendy.owens(b) (6) ███
- aaron.wilson(b) (6) ██
- tmapps(b) (6) ██
- kay.stimson(b) (6) █████
- sderheimer(b) (6) ██
- jcanter(b) (6) ██
- Edwin Smith
- Wilburg, Patricia (Fed)
- Hallett, Tim
- Richbourg, Paige

Invitation from Google Calendar

You are receiving this email at the account eburton █(b)█ gov because you are subscribed for cancellations on calendar eburton█(b) (6)█

To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

From: Maurice Turner<(b) (6)

Sent on: Thursday, August 13, 2020 8:29:15 PM

To: aaron.wilson(b) (6) ajoiner(b) (6) aregenscheid(b) (6) ben(b) (6) bhirsch(b) (6) cortiz(b) (6) dmunoz(b) (6) eburton(b) (6) edwin.smith(b) (6) ginnyb(b) (6) gwenyth.winship(b) (6) ian.piper(b) (6) ; jack.cobb(b) (6) ; jbowers(b) (6) jcanter(b) (6) jfleming(b) (6) jfranklin(b) (6) john.wack(b) (6) ; kathy.rogers(b) (6) ; kay.stimson(b) (6) ; mary.brady(b) (6) matt(b) (6) mcoutts(b) (6) mharrington@eac.gov; michael.walker(b) (6) msantos(b) (6) mturner(b) (6) ; oletts(b) (6) patricia.wilburg(b) (6) paumayr(b) (6) ; russ.dawson(b) (6) sderheimer(b) (6) sharon.laskowski(b) (6) smpearson(b) (6) tjhallett(b) (6) tmapps(b) (6) ; wendy.owens(b) (6) ; Jerome Lovato<jlovato@eac.gov>

Subject: Canceled: VVSG 2.0 Implementation Working Group Meetings

We are moving forward with a different format to achieve the same goal of evaluating, developing, and refining the requirements, test assertions and program manuals in order to bring the complete VVSG 2.0 to the Commissioners by the end of the year. Future collaborative sessions will be announced at a later time. Please continue to send your feedback and ideas directly to Jerome. Thank you for your commitment to the VVSG 2.0 process.

Maurice Turner
Senior Advisor
U.S. Election Assistance Commission
(b) (6) | www.eac.gov

From: Jerome Lovato<jlovato@eac.gov>
Sent on: Thursday, July 16, 2020 7:26:31 PM
To: Maurice Turner< (b) (6) ████████ >
Subject: Re: Invite List for VVSG Implementation Working Group
Attachments: VVSG 2.0 Implementation Working Group Contact List.xlsx (11.76 KB)

I have attached the spreadsheet. Will you be using a different Zoom link than the one that is already set up? If we are using the same link, I would like to add you as a co-host but IT would have to configure the Zoom settings to provide that capability.

On Thu, Jul 16, 2020 at 2:45 PM Maurice Turner < (b) (6) ████████ wrote:

> Hi Jerome,
>
> Can you send me the names & email addresses of everyone that should be invited to tomorrow's call? I'd like to send out the invitation along with the agenda before 5pm. Thanks.
>
> Maurice Turner
> Senior Advisor
> U.S. Election Assistance Commission
> (b) (6) ████████ □ www.eac.gov

VVSG 2.0 Implementation Working Group Contacts

Name	Organization	Title	Email
Aaron Wilson	CIS		aaron.wilson(b) (6)
Amanda Joiner	EAC		ajoiner(b) (6)
Andrew Regensheid	NIST		aregenscheid(b) (6)
Ben Adida	VotingWorks		ben(b) (6)
Bernie Hirsch	MicroVote		bhirsch(b) (6)
Chris Ortiz	Unisyn		cortiz(b) (6)
Danielle Munoz	EAC		dmunoz(b) (6)
Eugene Burton	EAC		eburton(b) (6)
Edwin Smith	Smartmatic		edwin.smith(b) (6)
Ginny Badanes	Microsoft		ginnyb(b) (6)
Gwenyth Winship	Clear Ballot		gwenyth.winship(b) (6)
Ian Piper	Dominion		ian.piper(b) (6)
Jack Cobb	Pro V&V		jack.cobb(b) (6)
Jessica Bowers	EAC		jbowers(b) (6)
Jim Canter	Hart		jcanter(b) (6)
Jessica Fleming	EAC		jfleming(b) (6)
Joshua Franklin	EAC		jfranklin(b) (6)
John Wack	NIST		john.wack(b) (6)
Kathy Rogers	ES&S		kathy.rogers(b) (6)
Kay Stimson	Dominion		kay.stimson(b) (6)
Mary Brady	NIST		mary.brady(b) (6)
Matt Pasternack	VotingWorks		matt(b) (6)
McDermot Coutts	Unisyn		mcoutts(b) (6)
Mona Harrington	EAC		mharrington@eac.gov
Michael Walker	Pro V&V		michael.walker(b) (6)
Mike Santos	SLI		msantos(b) (6)
Maurice Turner	EAC		mturner(b) (6)
Olivia Letts	EAC		oletts(b) (6)
Patricia Wilburg	NIST		patricia.wilburg(b) (6)
Paul Aumayr	EAC		paumayr(b) (6)
Russ Dawson	Clear Ballot		russ.dawson(b) (6)
Sam Derheimer	Hart		sderheimer(b) (6)
Sharon Laskowski	NIST		sharon.laskowsk(b) (6)
Steve Pearson	ES&S		smpearson(b) (6)
Tim Hallett	ES&S		tjhallett(b) (6)
Traci Mapps	SLI		tmapps(b) (6)
Wendy Owens	Pro V&V		wendy.owens(b) (6)

From: Jerome Lovato
To: Jessica Bowers
Cc: Joshua Franklin; Mona Harrington; Maurice Turner
Subject: Re: Agenda for the July 10th working group call
Date: Friday, July 10, 2020 10:04:03 AM

Thank you for your feedback, Jessica and Josh.

(b) (5)

On Fri, Jul 10, 2020 at 11:15 AM Jessica Bowers <(b) (6)　　　　　> wrote:

> Here are my thoughts:
>
> (b) (5)
>
> Jessica

From: Joshua Franklin <(b) (6) ████████>
Sent: Friday, July 10, 2020 9:04 AM
To: Jerome Lovato <jlovato@eac.gov>
Cc: Mona Harrington <mharrington@eac.gov>; Jessica Bowers <(b) (6) ████████>; Maurice Turner <(b) (6) ████████v>
Subject: Re: Agenda for the July 10th working group call

All,

(b) (5)

████████████████████████████

Regards,

Josh

On Thu, Jul 9, 2020 at 6:22 PM Jerome Lovato <jlovato@eac.gov> wrote:

(b) (5)

████████████████████████

On Thu, Jul 9, 2020 at 6:10 PM Mona Harrington <mharrington@eac.gov> wrote:

(b) (5)

████████████████████████

Sent from my iPhone

> On Jul 9, 2020, at 5:13 PM, Jerome Lovato <JLovato@eac.gov> wrote:
>
>
> Hi Mona,
>
> Attached is the agenda for tomorrow's call. I want to run it by you before distributing
to the group. **(b) (5)** ███████████████████████████████████████
███████████████████████████████████ Please let me know if
you have any feedback.
>
> Thank you,
> Jerome
> <EAC VVSG 2.0 Implementation Working Group Agenda - July 10, 2020.docx>

June 30, 2020

U.S. Election Assistance Commission (EAC)
1335 East West Highway, Suite 4300
Silver Spring, MD 20910

Mona Harrington
Jerome Lovato

RE: VVSG 2.0 Requirements comments

Mona & Jerome,

Thanks again for the opportunity to continue the discussion around the VVSG 2.0 Requirements. We're definitely not blind to the stress placed on you guys to get this right *and get it right fast*. We want the same thing.

In Friday's meeting you asked the manufacturers to highlight specific Requirements that pose challenges, accompanied by additional detail on technical feasibility. In Hart's original submitted comments, you'll find detailed feedback on both the strict language and impact of each Requirement, including an explanation on *why* the language poses a challenge.

Feasibility is measured in a variety of ways, and our comments were drafted with citations to one or more key factors that will impact feasibility. Primarily, these factors include technical hurdles, cost of goods, time to market, and usability (i.e., impact on the end user). Additionally important to this discussion is the understanding that feasibility is also an evaluation on the quality of the Requirement itself, and we drafted our response with a focus on listing those deficiencies in the Requirements as written.

A good example of one of our comments that includes this detail already is on Requirement 6.1.D Audio Privacy. The draft language states that "Audio during the voting session must be audible only to the voter." This is a great example of a well-intended Principle that lacks necessary technical specificity. Unfortunately, without a measurable number of decibels and a standard for distance between voting stations, "audible" is little more than a subjective standard which we have no calculable way to attain. Without more detail, our only ability to comply would be to supply more expensive, noise-canceling headphones, and so, in our comments we note that "cost" will be impacted. However, it is entirely possible that we may be able to comply with the Requirement without the need for more expensive equipment, but the Requirement doesn't provide us a path to get there. As it stands, we would need to initiate an RFI to know.

Another good example – one that demonstrates a challenge shared across the industry – is on 11.3.1-B Multi-factor Authentication for Critical Operations. We state in our response: "Cost. It will increase cost to the system to add multi-factor authorization to voting devices." This aligns with, among others, OSET's response #26, in which they state that OSET "…cautions against Sec. 11.3.1-B's requirement that multi-factor authentication (MFA) be required for opening and closing the polls at in-person polling places." OSET goes on to list other reasons why it is not feasible, all of which Hart agrees with wholeheartedly. We highlight this specific case because it serves as a good example of an industrywide challenge in a specific VVSG 2.0 Requirement.

As highlighted above, feasibility starts with viable Requirements. And so, in our submitted comments we call specific attention to those Requirements that lack the specificity and detail necessary for us to provide meaningful feedback on feasibility.

We highly recommend that NIST bring in support staff with experience in the IEEE Computer Society Standard 830-1998. Scientists trained in the IEEE standard can provide an unbiased, expert analysis on the maturity and readiness of the Requirements.

As we've cited previously, a good example of an ambiguous Requirement can be found in Requirement 9.4-A, Efficient Compliance Audit, which states "The voting system must produce records to enable an efficient compliance audit." This is the extent of the Requirement as drafted. What is "efficient?" How is it measured? We can't provide an analysis of our roadblocks to compliance without understanding *exactly what* is being tested.

Ultimately, we cannot assess what we do not understand. And if not understood, feasibility cannot be determined.

We drafted our submitted comments with the hope that they will point you to Requirements that need a bit more bake time. And we would be more than happy to set up a call in which our experts can walk the EAC's VVSG team through our comments to provide direct feedback on the challenges manufacturers and VSTLs will face if the Requirements are not supplemented with additional information. Just let us know, and we'll get something set up.

This is going to take a full team effort, and you have our commitment to dedicate whatever resources are necessary to help the EAC adopt an updated VVSG sooner-rather-than-later. Please consider us a resource and let us know how we can continue to provide value in this process.

–The Hart InterCivic VVSG team

Contents

A primary objective in the review of the VVSG 2.0 Requirements is to *determine its readiness* to use the guidelines as written for development of VVSG 2.0 compliant voting systems. For each of the fifteen principles, Hart reviewed every requirement against best practices as defined by IEEE Computer Society, Standard 830-1998, IEEE Recommended Practice for Software Requirements. Per IEEE 830-1998, characteristics of a good requirement must be:

- Correct
- Unambiguous
- Complete
- Consistent
- Ranked for importance and/or stability
- Verifiable
- Modifiable
- Traceable

Unambiguous is a key characteristic of a good requirement. IEEE 830-1998 defines an unambiguous requirement as "…every requirement stated therein has only one interpretation." Unfortunately, many of the VVSG 2.0 Requirements, as currently drafted, fail to achieve this standard. While Hart's submission will provide specific comments on the ambiguity of the requirements, one example is useful to provide context to drive the importance of unambiguous requirements.

Within Principle 9, there is this the goal for "efficient" audits. As a high-level Principle, this is good, but as a Requirement, the language is ambiguous: "9.4-A, Efficient compliance audit." This is the extent of the requirement as drafted. But what does "efficient" mean and how is it measured? The requirement is silent on this, and thus fails to meet many of the eight characteristics of a good requirement per the IEEE specification, most importantly, unambiguous.

The example provided is just one of a serial problem that exists throughout the VVSG 2.0 specification that must be addressed to be an effective guide in the development of compliant systems. Without it, there will be a high dependency on the Test Assertion process, which will slow manufacturers' ability to engineer the systems, or there will be a high use of the EAC's RFI (Request for Information) process to add clarity to an insufficiently drafted Requirement, resulting in the further dampening of efforts to build compliant systems. The best approach is to follow good*, well proven,* requirements generation as defined by the IEEE.

Principle 1: High Quality Design

The Requirements in Principle 1 include many of the basic functions of a voting system and are generally well drafted and well-intended. However, several of the Requirements in Principle 1 suffer from similar issues:

- Requirement writing that is not precise and unambiguous. When a Requirement can be interpreted in multiple ways, or does not appear to be measurable, it is challenging to build a system that complies.
- Attributing the responsibility for meeting a Requirement to something that cannot take action. For example, multiple Requirements state that the "election definition" must take a specific action. Since an election definition consists of data only and cannot take actions, it is unclear which components of the voting system must meet the Requirement.
- There are multiple Requirements in this section that are duplicates of Requirements in other sections but are written differently here. This duplication will lead to conflicting interpretations and ambiguity in the standard as a whole.
- Some Requirements appear to be outside of the existing scope of the VVSG, such as Requirements stating that electronic poll books must be tested in some situations.

Section 1.1

Our primary concern in section 1.1 is that multiple requirements appear to conflict with, or not allow, system functionality required by state and local laws and/or rules.

Specifically:

- There are requirements that would prevent our customers from continuing to use some commonly used L&A test processes.
- There are requirements that appear to disallow a common form of ballot construction where all contests from all parties are placed on a single ballot in an open primary. This ballot layout is required in multiple states.
- There are requirements that disallow a commonly used workflow, where polls are closed for Election Day voting and then reopened to process additional, usually absentee, ballots. Again, this is currently required in multiple states.
- There are requirements that mandate the use of unique identifiers on ballots. While this practice is useful for Risk-Limiting Audits, it is also illegal in multiple states.

Additionally, this section redefines what must be in a cast vote record (CVR). Our primary concerns are:

- Some requirements introduce security risks.
- Other requirements will inflate the size of a CVR, incurring additional cost or slowing performance. All of these items could be provided in a system export, rather than in the CVR itself, without affecting cost or Election Night performance.

Section 1.2

Section 1.2 defines a series of tests around undefined concepts of "typical" mark distributions, ballot volumes, and other metrics. American elections are extremely diverse, and there is no single definition for a typical election, typical use, or typical volume. This makes it likely that each test lab will develop its own definition of "typical," leading to substantially different test efforts being performed at different VSTLs. In any case, specific testing in a "typical" scenario seems unnecessary and would only add cost and complexity. The VVSG already includes other requirements that mandate comprehensive testing through the entire range from low to high volumes, including above the stated system limits.

Section 1.3

All of the requirements in this section 1.3 are subjective, unmeasurable, and unnecessary. The intent appears to be to require that the system be testable. This is unnecessary. If a VSTL is unable to test a system to their satisfaction that system will not gain VVSG certification. There is no need for these additional requirements.

Additionally, the requirements are structured around ensuring things that cannot be ensured by a system under test – specifically that the testers themselves can select appropriate tools and develop tests, etc.

We believe this section should be either wholly removed, or entirely rewritten to require specific, measurable deliverables in the TDP or system design.

Requirement	Comment	Challenges
1.1.1.C Define political geographies	It is unclear if the list of political geographies is meant to define specific objects that must be present in the system. In an election system, all geographies are simply collections of precinct-splits. Does the voting system have to contain a literal set of labels for each item listed in 1-3, even though these are logically identical in the system? (i.e., there is no difference between a city and a district – both are simply collections of precinct-splits). The list is not comprehensive and seems unnecessary in the requirement. Perhaps this is better placed as an example in the discussion.	

1.1.1-J Confirm recording of election definition	This Requirement is ambiguous. It ascribes the required action to the "election definition," but an election definition does not perform actions. It is unnecessary for the system that writes the election definition to verify it, and doing so during a write will slow down system performance. Components downstream should (and do in current systems) validate the election definition before using it. Does validation that occurs when read or imported satisfy this requirement?	
1.1.1-K Election definition distribution	An election definition should never be capable of generating additional artifacts. This would require it to contain executable code, which is a bad security practice. We recommend: "election management system" or something similar.	
1.1.1-M Auto-format	This Requirement is too vague - who defines what "jurisdictional requirements" are? How can this be tested or measured? It is also unclear whether this Requirement discusses formatting (font size, weight, etc.) or the inclusion of contests and ballot content on the ballot. If it is talking about actual formatting, it should include an allowance for manual formatting which is required in many jurisdictions.	
1.1.1-P Nonpartisan formatting	This is covered in Principle 5; it should not also be covered here.	

1.1.1-X Retaining, modifying, reusing definitions	The implications of this requirement are unclear for reuse within the same election.

What does it mean to "reuse" "general districting or precinct definitions" within the same election? | |
| **1.1.1-Z Data inputs and outputs** | This is already required in the interoperability section and should not also be included here.

1.1.1-Z #3 The intent is unclear since the CDF defines a format for data exchange (imports and exports) but does not define a report format. | |
| **1.1.2.A Equipment setup** | This requirement is vague and appears to require the voting system to verify things that a human tester should be verifying.

We suggest using part of the discussion *as* the requirement, because it is better written than the requirements.

Hart's suggested requirements:

"The voting system must allow election personnel to conduct equipment and system readiness tests before an election to:
• ensure that the voting system functions properly,
• confirm that system equipment has been properly configured, and
• obtain equipment status and readiness reports." | |

1.1.2-D Verify proper installation of ballot styles	The system cannot verify that ballot styles have been properly selected by the user. Hart suggests this requirement be split into two requirements, with the following wording: 1. The system must allow the user to verify that software and ballot styles have been properly selected. 2. The system must notify an EO of any errors that occur while selecting or installing software and ballot styles.	
1.1.2-E Verify compatibility between software and ballot styles	This requirement uses vague terminology and is unclear. Hart suggests splitting the requirement into two, with the following wording: 1. Voting system components that use an election definition must be able to verify that an election definition was created from the same voting system version that is currently installed on the component. 2. The system must notify an EO of any errors that occur while loading an election definition.	
1.1.2-G Test all ballot positions	Hart suggests the following edit, to allow for systems that do not define discrete ballot positions (i.e., systems that do not use timing marks): "Scanners must allow for testing that uses all potential ballot positions in the election as active positions."	

1.1.2-J Testing calibration	Ballots are not a good choice for testing calibration in a scanner. Calibration testing varies by technology, but is typically performed using a specified test pattern with multiple shades and/or shapes. Hart suggests the following edit: Drop the phrase "test ballots." "Scanners must support testing the calibration of the paper-to-digital conversion (such as the calibration of optical sensors, the density threshold, and the logical reduction of scanned images to binary values, as applicable)."	
1.1.2-K Ballot marker readiness	This requirement is too vague. How can it be measured or tested?	
1.1.2-N Pre-election reports	1) This requirement should be modified to make it clear that all of this information does not need to be provided in one single report. Hart's suggested edit: "The voting system must provide the capability to report the following information:" 2) "Ballot preparation edit listings" is undefined, and we do not understand what this refers to.	
1.1.2-O Readiness reports for each polling place	1.1.2-O #s 3, 5, 6 This expand the scope of a voting system to include inventory management functionality. That is typically done by our customers outside the voting system.	

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	Additionally, this restricts system design and flexibility. Our current system intentionally does not require users to define where a device will be deployed beforehand (which would be needed for a "Readiness Report"). Instead, a device is assigned a polling place when it is configured for the election. This allows for much greater efficiency in equipment setup, and faster, more flexible deployment of spare units if needed on Election Day.	
1.1.2-P Readiness reports, precinct tabulation	1.1.2-P #6 This requirement is too vague. Who determines what is required "to accommodate administrative reporting..."?	
1.1.2-Q Readiness reports, central tabulation	1.1.2-Q #6 This requirement is too vague. Who determines what is required "to accommodate administrative reporting..."?	
1.1.2-R Readiness reports, public network test ballots	Conflicts with 14.2-F. If the system is not allowed to connect to an external network, how could the system send ballots over a public network?	
1.1.3-B Verify L&A performed	It is not possible to meet this requirement with all L&A methodologies. For example, one system design involves fully clearing all memory after an L&A test. This design ensures the system has no knowledge of whether a test is currently being run or if live election results are being recorded – and so is not	

	capable of behaving differently in a test than it does in the live election. As written, 1.1.3-B requires the system to keep a record of previous tests, which could be taken advantage of by a compromised system. Additionally, the voting system should not be responsible for determining if a L&A test passed or failed. This is the responsibility of the humans testing the system. A compromised device could return "pass" regardless of the result of the test, so the system should not be trusted with testing itself or reporting that a test has been performed.	
1.1.3-C Prevent opening the polls	Hart does not agree with this requirement. Different jurisdictions across the country use different L&A methodologies. Requiring that each device pass an L&A test before use would force many jurisdictions to change the way they run currently run L&A tests and dramatically change the amount of work required in many jurisdictions. Also, our comments from 1.1.3-B apply to 1.1.3-C as well. However, we agree it is reasonable to require that a device does not have any recorded results before allowing polls to be opened (for example, that test data has been isolated). We recommend rewriting this requirement to focus only on preventing polls from being	

	opened if there are already votes recorded on the device.	
1.1.3-D Non-zero totals	This appears to be a duplication of 1.1.3 C. We recommend having only a single requirement that requires the "vote counters have been zeroed" prior to opening polls.	
1.1.3-E Scanners and ballot marking devices - enter voting mode	This requirement is redundant - 1.1.3-F.3 covers the same thing.	
1.1.4-B One cast ballot per session	This requirement does not apply to all voting scenarios used in the United States. In some places, joint elections are held where voters are issued separate ballots for each local jurisdiction. As written, this requirement would hurt usability and introduce additional human error, because a poll worker would have to activate each of those ballots separately. **Hart's Suggestion: Rewrite the requirement as follows:** "The voting system must not provide more ballots than authorized to a specific voter."	
1.1.4-C Contemporaneous record	This requirement is vague and unclear. What is considered a "credential" in this context? It appears the goal is to be able to reconcile ballots issued to ballots cast – however this can be (and is) accomplished without having or recording voter-specific credentials.	

	If something voter-specific is required, we believe this would be better placed in the device audit log rather than a paper record (as implied in the discussion).	
1.1.4-D Control ballot configuration	This requirement is too broad and attempts to cover electronic ballot-specific requirements in a requirement written to apply to all ballots. For example, how can you "disable all portions of the ballot the voter is not entitled to vote on" on a printed ballot? This requirement also appears to mandate behavior for open primaries that may conflict with state and local rules and laws.	
1.1.5-B N-of-M voting	There appears to be a typo in this requirement. A voter does not select a specified number of contests in N of M, they select a specified number of ballot options. Hart suggests the requirement be rewritten as follows: "For the N-of-M voting method, the voting system must be capable of gathering and recording votes in contests where the voter is allowed to choose up to a specified number of options."	
1.1.5-F Open primaries	This requirement appears to mandate behavior for open primaries that may conflict with state and local rules and laws. It seems to disallow open primary ballots where contests from multiple parties are	

	presented on the same sheet. This is a commonly used approach in U.S. elections.	
1.1.5-I Ballot rotation for contest options	The phrase "does not show bias to any contest option" is vague and could be interpreted differently by different audiences. While the goal of ballot rotation is to minimize bias introduced by ballot order, different implementations used in U.S. elections have different advantages and disadvantages. We suggest rewording the requirement as follows: "For ballot rotation, the voting system must be capable of gathering and recording votes when the ordering of contest options in ballot positions within each contest is variable across different ballot styles."	
1.1.6-F Record contest selection information	1.1.6-F #2 Ballot position is not necessary in the CVR recorded by the voting system. It can be cross-referenced in multiple ways with other parts of the system and included in exports if needed. Including it will lead to larger CVR size (and therefore cost or performance impacts).	
1.1.6-G Record write-in information	1.1.6-G #4: **The CVR should be immutable after being written.** Adjudication actions performed after the ballot is cast should not be recorded in the CVR, and this should be explicitly addressed in	

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	this requirement. Requiring systems to edit or alter CVRs after they have been recorded is a bad practice and lowers the security of the system. For example, adjudication is typically performed in a separate, centralized tabulation system. When implementing the security best-practice of "least-privileges," a centralized tabulation system should have no ability to write or modify CVRs.	
1.1.6-H Record election and contest information	**1.1.6-H #2** Voting method is not necessary in the CVR recorded by the voting system. It can be cross-referenced in multiple ways with other parts of the system and included in exports if needed. Including it will lead to larger CVR size (and therefore cost or performance impacts).	
1.1.6-J Record detected mark information	Marginal mark information is not necessary in the CVR recorded by the voting system. Including it will lead to larger CVR size (and therefore cost or performance impacts). We believe recording it at all is unnecessary when a system provides the ability to notify the voter of a detected marginal mark and given the opportunity to correct their ballot. If deemed necessary to record, the standards should allow this to be recorded in a location outside of the CVR, so that it can be accessed only when needed and does not have to be	Writing this would bloat the size of the CVR record potentially driving up cost of memory devices and slowing results reporting.

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	transferred and read by downstream systems (which impacts Election Night performance and therefore system cost).	
1.1.6-K Record audit information	**1.1.6-K #2** The voting system does not know the geographical location of the device. We suggest rewording this to require the polling place name. **1.1.6-K #4** This requires the use of unique identifiers on ballots, which is not allowed by law in many jurisdictions.	
1.1.7-A Ballot handling functions for scanners	We suggest rewording this so that these functions are required of the voting system as a whole rather than the scanner itself. This is consistent with guidance in other parts of the VVSG 2.0 requirements to allow for COTS scanners that are not purpose-built for elections. Suggested rewording: "Voting Systems must provide features for handling ballots when they are scanned individually using voter-facing scanners or scanned in batches using batch-fed scanners."	
1.1.7-D Ballot separation when batch feeding	This requirement mandates *how* something needs to be accomplished rather *what* needs to be accomplished; therefore, overly restrictive. With modern voting technology, segregation of ballots with different condition can be handled entirely with electronic adjudication, which is not	**Cost** Most COTS scanners cannot stop on a specific ballot because scanned images are sent to a workstation and image analysis is only performed after the physical scanning is completed for a ballot. Meeting this requirement would require real-time processing and effectively disallow the COTS

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	allowed by this requirement as written.	scanners used by at least three vendors.
1.1.7-H Scan to manufacturer specifications	It is unclear what advantage is provided by publishing this information. There are already requirements for the kinds of marks a voting system must count and not count, and sufficient accuracy requirements to ensure a voting system is performing correctly. Additionally, mark detection is a core technology of a voting system and the specifics are both proprietary and are trade secrets.	
1.1.7-K Accurately detect imperfect marks	This is a poorly drafted requirement. The mark specified here is arbitrary and does not account for real world conditions. This mark is not a mark that would be made by voter but could easily be interpreted as a fold line by a fold line detection algorithm. Also, this potentially conflicts with 1.1.7 "M" and 1.1.7. "N" which require systems to ignore marks that were not made intentionally by voters.	
1.1.7-M Ignore extraneous marks inside voting targets	We agree that this problem should be minimized by the voting system, but the requirement here requires the voting system to eliminate it. That is not possible in all cases. Some extraneous marks caused by things external to the voting system cannot be reliably distinguished from a voter mark by a scanner.	

	In the real world, these risks are mitigated by a combination of specifications (for ballot stock quality, for example), best practices (for fold locations, for example), and human review. The voting system alone cannot identify and ignore such marks with 100 percent accuracy.	
1.1.7-N Ignore hesitation marks	This requirement is vague and needs a definition for "hesitation marks" and "insignificant marks." Who defines what should and should not count as "insignificant"? How would we build to this standard without such a definition?	
1.1.7-P Repeatability	This is highly dependent upon other "environmental" factors, such as marking device, calibration, and possibly other factors. A marginal mark is, by definition, a mark that may fall above or below a mark detection threshold. To detect such a mark, additional thresholds must be used – and thus marks detected near the marginal mark detection thresholds will not be repeatable in all cases. The discussion acknowledges that marks that fall precisely on the mark detection threshold cannot satisfy this criteria, but fails to consider that detect marginal marks also requires sensing thresholds.	
1.1.8-B No voting when polls are closed	Some jurisdictions require the ability to reopen the polls for various reasons, such as	

	scanning absentee ballots in the Election Day polling place. This requirement would not allow that, and would conflict with some state laws and/or rules. We suggest the requirement be reworded as follows: "The voting system must prevent the further enabling, activation, marking, or casting of ballots by any device **while the polls are closed**.	
1.1.8-E Prevent reopening polls	Some states require poll workers to be able to re-open polls so that they can process ballots that could not be process earlier in the day or process absentee ballots. This requirement conflicts with state laws and/or rules.	
1.1.9-A Voting methods when tabulating	Is the implementation statement in VVSG 2.0 a binary yes/no for voting methods, or can the manufacturer declare partial support, for example vote capture only? In our current system, we support vote-capture-only for Ranked Choice Voting because there is no commonly adopted set of rules for tabulating Ranked Choice contests. This allows our customers to hand-tabulate or use a 3rd party tabulation tool that meets their needs (for example, rankedchoicevoting.org's Universal RCV Tabulator). Separate, standalone requirements for tabulating each voting method would	

	disallow our current approach, and discourage the development of interoperable third-party tools.	
1.1.9-E Accept or reject recallable ballots individually	This requirement defines how recallable ballots are implemented and is overly restrictive compared to the intent stated in the discussion. Accepting and rejecting provisional and recallable ballots can be handled in multiple different ways, including the common practice of segregating provisional paper ballots, and only scanning ballots when the decision has been made to accept them. To address the intent stated in the discussion, the requirement should be reworded to state: "The ID assigned to each provisional or recallable ballot must be unique within the current election."	
1.1.9-F Accept or reject recallable ballots by category	This requirement is too vague; it is unclear what this means. What kinds of categories are envisioned? Why would acceptance/rejection by category even be required?	
1.1.9-P Ranked choice voting	See comments for 1.1.9-A	
1.1.10-B Reporting device consolidation	The standard should allow this function to be performed in the central Tabulation System. Our customers do not request and do not want the ability to consolidate results in the polling place.	Consolidating results in the polling place requires either additional hardware (for direct device-to-device communication) and/or breaking seals and removing memory devices in the polling place. This introduces a security risk and the potential for human (poll worker) error, for something that election officials don't want in the first place.

1.1.10-D Ballot and vote counts	**1.1.10-D #2** This is ambiguous. Voting system manufacturers will be unable to tell if it is requiring the actual text of the issue from the ballot (which does not belong on results reports) or using text in a generic sense. **1.1.10-D #3** It is unclear why the VVSG would require alphanumeric audit content to appear on reports of vote and ballot counts, nor what kind of audit content is being considered.	
1.1.10-G Discrepancies detectable	What is the definition of "discrepancy"?	
1.1.10-I Precinct reporting devices, no tallies before polls close	The requirement, as written, disallows a jurisdiction from retrieving vote records from a device that has become inoperable during the course of the voting event, but which has votes stored in its memory. Jurisdictions across the country need to be able to retrieve recorded votes from such equipment, and provided that your system has adequate security measures implemented in the first place, there is no reason to disallow this. **Hart suggests the requirement be reworded as follows:** The voting system must prevent the printing of tabulation reports before the polls close.	
1.1.10-N Report overvotes for each contest	The requirement is fine; however, the discussion requires further work - many jurisdictions do not want to report overvotes this way.	

	If a reader of the reports wants to understand this value – votes lost – it is as simple as multiplying the number of ballots that contained an overvote for this contest by the "N" from "N of M." There is no value in requiring a specific presentation of the data here.	
1.1.10-S Post-election reports in common data format	The requirement needs to include the specific version of the CDF being required. Without a specific version we are building to a moving target, which will increase cost and delay certifications if the CDF specification is updated after feature development but before certification. Additionally, this requirement should be in the Interoperability section and should not be duplicated here.	
1.1.10-T CVR export and import in common data format	This is a redundant requirement; same discussion as 4.1. The requirement needs to include the specific version of the CDF being required. Without a specific version we are building to a moving target, which will increase cost and delay certifications if the CDF specification is updated after feature development but before certification. Additionally, this requirement should be in the Interoperability section and should not be duplicated here.	
1.1.10-U Reports are time stamped	This is a bad requirement because the ISO 8601 is not a	

	good standard for reports intended for consumption by the general public. The standard requires the use of military time (24 hr clock) and year/month/day formatting for dates, both of which are non-intuitive to the general public and will make reports less readable.	
1.2-C – Ballot position distribution	The requirement is difficult to quantify. There is not a "typical volume per device" nor a "typical election" in American elections. Elections and equipment use cases are very diverse across the country. Test labs already test all devices up to their published volume limits. What is the advantage in adding additional tests at a lower "typical" volume?	Cost Additional test and certification scope that does not provide additional value.
1.2-D – Mark quality	The requirement is difficult to quantify, and there is no "expected distribution in a typical election." Hart suggests that the requirement be reworded as follows: *"For devices that read and interpret human-made marks on ballots, the mark quality of the marks must be spread across the manufacturer's published specifications for valid marks and invalid marks ~~according to expected distributions in typical elections."~~*	Cost Meeting the requirement, as written, would likely require the development of an advanced toolset to automatically mark ballots with a broad variety of mark styles at various distribution rates.
1.2-E – Assessment of reliability	Please define "continuous operation"; is it by a user, or scripted? An environmental test	

	chamber may not allow for the user to be present at all times.	
1.2-F – Continuous operation – typical environmental conditions	Real world use would operate with pauses and not continuous operation. Continuous operation invites user error due to stress placed on personnel, may this test be paused as long as the entire operational period is completed?	**Cost** Additional personnel must be hired to complete 24/7 testing.
1.2-G Continuous operation – varied environmental conditions	Does the definition of "voting system" in this requirement include all of the COTS components? These operating conditions are dangerous for some peripherals, for example UPS devices. Additionally, Hart suggests restricting this requirement to only the system components that need to operate under varied environmental conditions. Systems used exclusively in an office do not need to be tested in varied environmental conditions.	
1.2-M Respond gracefully to stress of system limits	This needs more definition. What does "respond gracefully" mean? Does it mean to continue to operate or does it allow for slow-downs, errors, and/or warnings? How far above the system limits must be tested?	
1.2-N Handle realistic volume	Please expand on what "approximating normal use" means. Normal use will vary greatly between systems, will this be defined by the systems documented procedures?	
1.3-A Identifiability of basic and compound system components	This requirement is subjective and unmeasurable.	

	Who defines what a "tester is able to clearly and unambiguously identify"? What is the intent of this requirement?	
1.3-B Comprehensible processes that form system configurations	This requirement is ambiguous. It is unclear if this requires new deliverables in the TDP or if the documentation that was required for VVSG 1.1 and 1.0 is enough. Please advise if this is asking for an advance system configuration diagram.	
1.3-C Observable configurations via plausible observation methods	This requirement is subjective and unmeasurable. How can a system, or documentation set, "ensure a tester is able"? **Suggestion** The provided documentation of equipment must provide examples of expected behavior or error conditions.	
1.3-D Identifiable resolution limits for observation methods	This requirement is ambiguous and not measurable. Defining observational tools, techniques and strategies is the responsibility of the VSTL not the voting system vendor.	
1.3-E Description of observational noise and consequences for observational methods	This requirement is ambiguous and not measurable. Defining observational tools, techniques and strategies is the responsibility of the VSTL not the voting system vendor.	

1.3-F Explicitly stated performance criteria	The text of the requirement does not match the title. It is too ambiguous and unmeasurable.	
1.3-G Creation and execution of evaluation methods	This requirement is not measurable.	

Principle 2: High Quality Implementation

In general, this Principle requires refinement. Many of the Requirements listed throughout section 2.1 fit the definition of a Principle, as they are untestable as written. Furthermore, other Requirements in this section that are specific are difficult and cost prohibitive to test and demonstrate compliance. One notable example is Requirement 2.1-D Records requiring that they last at least 22 months. There is no question that storage media must be carefully selected during design to ensure that all records must last for at least 22 months, however the requirement text that states "...during an election and for a period of at least 22 months afterward, in temperatures ranging from 5 C to 40 C (41 F to 104 F) and relative humidity from 5% to 85%, non-condensing..." could lead to confusion and the belief that an undefined 22-month voting system hardware test is being prescribed.

A concern echoed by many voting system manufacturers is regarding the EMC test levels prescribed in this and prior VVSG revisions. The test level (intensity) requirements between tests vary and appear to be arbitrarily chosen to be the higher level without regard to the equipment category, application, or environment in which the voting systems will be deployed. This increases cost and time to market while reducing availability of COTS components for integration. For example, Radiated and Conducted Emissions require FCC Class B, the higher test level, when a Class B digital device is defined in *Title 47 CFR § 15.3 - Definitions* as "A digital device that is marketed for use in a residential environment...". The test levels historically selected for Electromagnetic Susceptibility and Magnetic Field Immunity are used for Industrial equipment, in the cases of those tests a more intense test level than commercial. Finally, Electrostatic discharge immunity prescribes the most intense test level, typically reserved for the likes of medical devices.

Where possible, we have included proposed changes to wording or terms to refine the requirement to be more specific, testable, and consistent.

Requirement	Comment	Challenges
2.1-C Acceptable coding conventions	The discussion comments are unclear and open-ended. What conditions and which cases does the EAC or VSTL specify coding conventions?	
2.1-D Records last at least 22 months	Testing guidelines for 22 months and temperature and relative humidity are not defined.	Testability
2.1.1-A General build quality	This is a principle and not a requirement. This is not measurable.	
2.1.1-B High quality products	This is a principle and not a requirement. This is not measurable.	

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2.1.1-C High quality parts	This is a principle and not a requirement. This is not measurable.	
2.1.1-D Suitability of COTS components		**Supply Chain** The environmental condition requirements are restrictive to the point of severely limiting COTS choices to mil-spec grade devices.
2.1.1-E Durability	This is a principle and not a requirement. This is not measurable.	
2.1.2-A Electronic device maintainability	Requirements are too vague and undefined (e.g. "routine maintenance").	
2.1.2-B System maintainability	Requirements are too vague and subjective. For example, how is "easy" measurable; who determines what is easy?	
2.2-A User-centered design process	How is this requirement measured? How is an effective user-centered design process measured? Who defines effective and successful documentation? How is this requirement to be applied to the extension of existing fielded systems submitted for VVSG 2.0?	
2.4-C Module size and identification	Too subjective and undefined.	
2.4-D Lookup tables in separate files	Too ambiguous. What is the definition of "lookup-table?"	

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	The requirement should define. **Recommendation:** A Lookup Table is a set of immutable data in code that doesn't require transformation before usage by objects at runtime.	
2.5.4-M Election integrity monitoring	This is a principle and not a requirement; not measurable and too broad.	
2.6-A Surviving device failure	No criteria associating with the word "following." For example, is a reboot allowed?	
2.6-C Surviving component failure	No criteria associating with the word "following". For example, is a reboot allowed?	
2.7-A Ability to support maintenance and repair physical environment conditions – non-operating	**Suggestion** *All voting devices must be able …* **Note** Method reference is out of date and does not align with revision MIL-STD-810H.	
2.7-C Ability to support storage temperatures in physical environment – non-operating	**Suggestion** *All **polling places devices** must be able…* **Note** Method reference is out of date and does not align with revision MIL-STD-810H.	
2.7-D Ability to support storage humidity levels in physical environment – non-operating	**Suggestion** *All **polling places devices** must be able…* **Note** Method reference is out of date and does not align with revision MIL-STD-810H.	

2.7-E Ability to operate as intended at specified humidity conditions - operating	**Suggestion** *All **polling places devices** must be able …* **Note** Method reference is out of date and does not align with revision MIL-STD-810H.	
2.7-F Ability to operate as intended at specified humidity conditions - operating	**Suggestion** *All **polling places devices** must be able …* **Note** Method reference is out of date and does not align with revision MIL-STD-810H.	
2.7.1-A Electrical disturbances	Not measurable. Procedure not defined.	
2.7.1-B FCC Part 15 Class A and B conformance	2.7.1-B #2 Please define "non-place."	
2.7.1-D Power port connection to the facility power supply	This requirement is not measurable; procedure is not defined.	
2.7.1-F Outages, sags, and swells	This requirement is not measurable; procedure is not defined.	
2.7.1-G Withstand conducted electrical disturbances	This requirement is not measurable; procedure is not defined.	
2.7.1-H Emissions from other connected equipment	This requirement is not measurable; procedure is not defined.	
2.7.1-I Electrostatic discharge immunity	This requirement is not measurable; procedure is not defined. Discussion from 2.7.1-A is inclusive of ESD.	

2.7.1-J Radiated radio frequency emissions	This requirement is not measurable; procedure is not defined. Appears to be the same as 2.7.1-B-1: 1. *"Voting devices located in polling places must comply with Class B requirements." Class B requirements include both Radiated and Conducted emissions.*	

Principle 3: Transparent

Hart strongly agrees with this Principle, however there is some ambiguity in the regulatory text that must be clarified to avoid implementation challenges. Requirements must be specific and testable to implement with a high level of confidence that they objectively comply with the requirement. For example, the regulatory text of requirement 3.2-H Variable value inspection procedure is brief and vague. "Values" may be interpreted as strings, numerical values, or even file metadata.

Another specific concern is the text of requirement 3.1.4-G Compiling Installation prohibited implies that Just-In-Time (JIT) compilation, utilized by modern runtime environments like Java and .NET, would be prohibited.

Lastly, Requirement 3.1.4-L Open market procurement of COTS software does not account for implementations where the manufacturer is a licensee of the COTS software, allowing for a minimized kiosk installation in support of surface attack reduction in the spirit of requirement 3.1.4-D Election specific software identification. In this implementation, no software or software features are installed that are not specific to the voting system.

Requirement	Comment	Challenges
3.1.1-D Identify software and firmware by origin	What does "in-house" mean? What is the definition of "sub-contractor"?	
3.1.4-D Election specific software identification	This requirement is unclear as to what is being requested; all software installed is specific to the voting system.	
3.1.4-G Compiler installation prohibited	Does this include JIT compilers such as Java and .NET?	
3.1.4-L Open market procurement of COTS software		This does not apply if the system manufacturer is the licensee of the COTS software and there is no open market deployment. All COTS components are imbedded within the packaged product image, and there are no separately installable COTS items.

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3.2-H Variable value inspection procedure	This requirement is too ambiguous. What is the definition of "Values"; what are they looking to inspect and how?	

Principle 4: Interoperable

Hart was actively involved in Common Data Format discussions, as early as 2014 when John Wack hosted initial working sessions at NIST. While the concepts of Interoperability and Common Data Formats are both noble approaches, they are very different in their practical implementation and usages. Throughout Principle 4, Interoperability, *voting devices* or *voting system* (which per the glossary includes voting devices) are defined as the primary target voting components utilizing interoperability. Principle 4, requirement 4.1-A best sums up the challenges with all operability requirements using NIST CDFs:

4.1-A – Data export and exchange format: *Voting devices* must include support for the NIST SP Common Data Format (CDF) specifications for data inputs and output:

1. Election programming and results reporting data, NIST SP 1500-100

2. Election event logging data, NIST SP 1500-101

3. Cast vote records, NIST SP 1500-102

4. Voter registration-related data, NIST SP 1500-104

The challenges with 4.1-A, and subsequent requirements, is that voting devices are required to support the import or export of the CDFs directly. In CDF meetings chaired by John Wack, the manufacturers were very transparent that this is an unrealistic goal. It was agreed upon, however, that CDF utilization is realistic and possible as routed through the election management system, allowing the common data format to be converted to/from manufacturer device-specific data formats. This is best explained in a diagram:

As written in VVSG 2.0	
As discussed throughout CDF development	
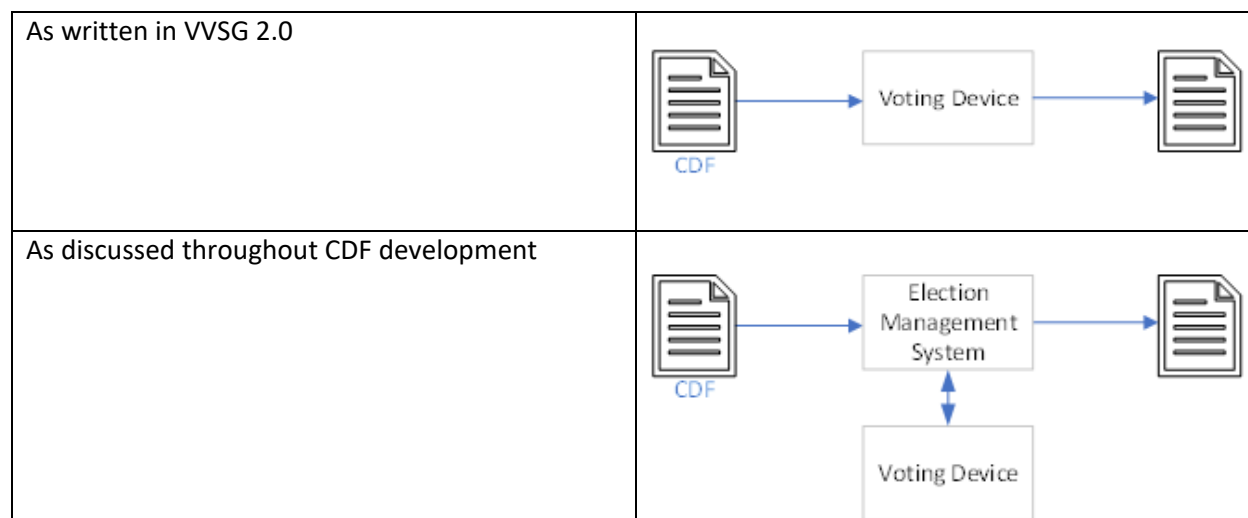
In fact, the sensitivity of direct-device support of CDF was implicitly stated in December 03, 2018 email by Wack, in which he stated "*A note of clarification: the CVR spec deals with what can be put into a CVR and how the data is structured, **but the CDF specs do not contain requirements for mandating their use with any particular class of devices** nor will we be discussing such requirements on this telecon.*" [emphasis added].

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There are practical limitations not considered in the drafting of Interoperability in the VVSG 2.0 specification. These include, but are not limited to:

1. Security
   a. Across manufactures, all voting devices control data input through security validation, be it encrypted data and/or nonrepudiation methods. The EMS and the devices share security keys needed for information exchange, such as election programming data. As the VVSG 2.0 is written, chain of trust to ensure that only trusted election programming data is imported into a device is not considered. Without the involvement of the EMS to bridge the CDF data from an untrusted party to the device, it is not possible, nor should it be allowed, to import data. All imported data into a voting device must be from a trusted source, and the only way to ensure trust is through tight security relationship.
   b. Similarly, all data exported from a device should be validated as trustworthy through encrypted and/or nonrepudiation methods. VVSG Principle 5 does not take this into account for data exported from a voting device. There are provisions into the VVSG 2.0 that account for report signing as exported from the Election Management System but bringing third party ley exchange into the devices is not considered, nor recommended as a safe and viable security practice.
2. Data Encoding via XML. As written CDFs are written as XML documents. Voting devices, by their nature are not inherently provisioned with hardware resources to process XML documents, which can grow very large based on the amount of data being imported or exported. Voting system manufacturers have optimized data imports and exports to/from the voting devices to account for small footprint resource requirements and adding the overhead to support XML documents imported/exported from the devices directly added unneeded and costly overhead. The Election Management System is tailored for this type of document exchange, and it provision to convert CDF formatted data to/from the needs of the devices.
3. One of the CDF requirements as listed is the election programming. It is unrealistic to believe that this in and of itself meet the requirements for voting devices to operate. Election data such as precinct, parties, contests, candidates, etc., as certainly core, and common components of the data required for a voting device to operate, but it is not limited to this, and manufacturer specific data and jurisdictional specific data not found in the CDF is also required. Thus, the EMS cannot be eliminated from voting device programming. Therefore, CDF programming data should be imported into the EMS, combined/merged with device/manufacturers/jurisdiction specific data, and then exported out of the EMS and into the devices through the air-gapped methods.

VVSG 2.0 goals for common data formats is realizable if the expectation first agreed upon between NIST and the manufacturers are met with the specification, that being voting devices to not directly need to support CDF imports and exports, that the Election Management System will be responsible for CDF-to/from-Device specific formats. Without EMS involvement, attainment of this principle as written is not realistically possible.

Unrelated to Common Data Formats, CDFs, but falling within Principle 4, is the requirement for "standard device interfaces," 4.3-A, "Standard, common hardware interfaces and protocols must be used to connect devices." What this *highly prescriptive* requirement fails to consider is manufacturers intentionally use non-standard interfaces and/or protocols as a method of security. Intentional

obfuscation of software or hardware protocols, including ports, is a method of security method to protect known attack vectors, such as USB or ethernet. The VVSG 2.0 should let the market drive the requirement, as purchasing jurisdictions should be the arbiters of security vs. convenience. **As written, this requirement will lessen security of voting systems that utilize obfuscation methods, which is counter to VVSG 2.0 goals.**

Please refer the feedback below that provided details into each of the requirements as documented within the VVSG 2.0.

Requirement	Comment	Challenges
4.1 Voting system data that is imported, exported, or otherwise reported, is in an interoperable format.	Applies to all CDFs. CDFs can be supported through the EMS interface to or from the devices through native conversion. There should be no requirement for "voting devices" to have direct CDF input or output requirements. They should reference which versions of the standard is required. As multiple versions are currently available for some standards.	**Testing** There are no provisions in the VVSG 2.0 documentation the describes the testing and qualification process of compliant common data formats.
4.1-A Data export and exchange format	Not all voting systems require or have this data, not all CDFs are applicable to every or any component of the system. Specifications should note which CDFs are input into an EMS, and which CDFs output from EMS.	
4.1-B Election programming data input and output	This requirement should call the specific CDF specification being referenced. "election definition processes is not defined" 4.1-B should callout import and export to and from the EMS.	

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4.1-C Tabulator report data	"Tabulation process" is undefined, requirement should specify tabulation performed within the EMS. Requirement states import and export, but not all EMS tabulation allow importing of election results. Needs strict definition of import and export requirements.	
4.1-D Exchange of cast vote records (CVRs)	This requirement should call the specific CDF specification being referenced. Requirement states import and export, but not all EMS tabulation and audit allow importing of cast vote records. Needs strict definition of import and export requirements. "Casting tabulation audit processes" should specify as performed within the EMS.	
4.1-E Exchange of voting device election event logs	This requirement should call the specific CDF specification being referenced. Requirement states import and export, but logs should only be imported into a log aggregation system within the EMS, other components of the EMS should not be required to import CDF log data. Needs strict definition of import and export requirements across EMS components. Should not explicitly call out voting devices but rather the exchange of election event logs through the EMS.	

4.2-A Standard formats	This is an open-ended requirement with no measurement criteria.	
	This is not measurable as who determines "where possible".	
4.3-A Standard device interfaces	What constitutes "a device"? What is the definition of "standard, common hardware interface." Who defines "standard" and "common"?	**Security** Highly prescriptive. This requirement does not allow manufactures flexibility to compete with enhanced interfaces.
		This requirement conflicts with a core security method of hardware obfuscation.
		For example, if USB as a standard protocol is used does this requirement mean that the physical port on a voting device must use USB as is defined, or can the port be obfuscated to enhance security?
		Another example, using one communication protocol over a different physical protocol connection for usability and/or security.
4.4-A COTS devices meet applicable requirements	As written the requirement should call out the specific VVSG requirements. Who determines what is applicable? **Suggestion** Reword the requirement: *"Devices are allowed in a system as long as the system as a whole meets VVSG requirements."*	

Principle 5: Equivalent and Consistent Voter Access

Hart agrees with intent of the requirements included in Principle 5. However, we have concerns about how the Requirements are currently written.

First, it is unclear (here and in other principles) whether VVSG 2.0 requires full accessibility features on every voting device in the system, or if the accessibility requirements can be satisfied by providing accessible features that cover every function (voting, reviewing, casting, etc.) on at least one voting device in each polling place.

For example, can all-in-one devices (mark, verify, cast) be used for voters who need accessible features while also deploying hand-marked paper ballots and a scanner (without accessibility features) for voters who do not need those features? We believe the VVSG should focus on what features must be provided without requiring all components to support all features. This allows for more innovation, lower costs, and more choice for election officials.

Second, the scope is unclear or undefined on multiple requirements. Many requirements call out the "voting system" for functionality that has been previously restricted only to voter-facing interfaces (audio functionality, for example). Other requirements do not define a scope at all, implying that they apply to all system components. Each requirement should clearly and unambiguously state which parts of the voting system it applies to.

Requirement	Comment	Challenges
5.1-A Voting methods and interaction modes	1) The requirement is unnecessarily broad and attempts to cover too many areas. Each voting method has unique requirements in this area. For example, vote-by-mail (listed in the discussion) does not support the same capabilities as in-person voting. Recommendation: break up discussion bullets and set them as actual requirements, instead of one umbrella requirement. 2) The use of the term "capabilities" is ambiguous — who defines specifically what functions or features must be included in all interaction modes?	

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5.1-B Languages	The requirement is not written to account for unwritten languages; you cannot display an unwritten language visually. It may be desirable to display English on-screen, synchronized with the unwritten language's audio, but that would violate the requirement as written. There is a potential conflict with 5.2-D. **Suggestion** Remove the word "storing" due to voter privacy concerns. Records should not be stored in the voter's selected language (other than paper records, which is already covered by "printing" in this requirement).	
5.1-C Vote records	The use of "paper records" is somewhat ambiguous here. What else counts as a record besides a paper ballot and paper verification records? Please specify what the definition of "all records" is.	
5.1-D Accessibility features	Does this requirement apply to all voting devices? Can this be met with some devices at each polling place without requiring the full feature set on every voting device in the system?	**Usability** Accessibility extended to the scanner. Hart's concern is that adding accessibility features to the scanner will raise cost and will cause bottlenecks and throughput problems at the scanner. This goal (accessible casting) can be met in other ways, without requiring accessibility features in all precinct scanners, if the requirement were written to allow it.

5.2-A No bias	The first sentence is too broad and ambiguous to be testable. The requirements should be specific and focus on individual audio, tactile, enhanced visual, and non-manual modes. The discussion lists two such specifics (volume and font size) but it is unclear what else, specifically, is covered by this requirement.	
5.2-B Presenting content in all languages	What is meant by "all information"? This requirement needs to be restricted to voter-facing content. A lot of information intended for poll worker and election official use should not be presented in other languages.	
5.2-C Information in all modes	This is a confusing requirement, regarding the intent of the "discussion" as the referenced information does not match. For example, the number of items in a list is not an instruction, warning, message, notification of undervotes or overvotes, or contest option, which is the scope defined in the requirement. What is the intent of the requirement? What should be included in the scope?	
5.2-D Audio synchronized	Phrasing should be changed to "voting devices" instead of "voting system." This functionality is not needed on EMS components, for example.	

Principle 6: Voter Privacy

As discussed in our introductory comments, Requirements must be unambiguous in order to be effective and measurable. The Requirements contained in this Principle, while not objectionable, are generally written in a way that is ambiguous. This will cause manufacturers to rely on Test Assertions to make sure that systems are designed in a way that meets the Requirements.

Requirement 6.1.D presents an example of this problem: 6.1.D appears to be simple: "Audio during the voting session must be audible only to the voter." However, even this simple statement results in questions about how many decibels is required, and how much distance one should assume between voters.

We recommend re-writing this section in a way that establishes Requirements that can be measured and tested without ambiguity. This feedback applies to the entire section. Requirements detailed below are called out for specific reasons, as well.

Requirement	Comment	Challenges
6.1.D Audio privacy	Not completely measurable. A measurable number of decibels is necessary to measure audio sound. How does one ensure proper distance between voters?	**Cost** Depending on how this requirement is interpreted, more expensive headphones may be required.
6.2-A Voter Independence	Need clarification on whether all polling place components are required to meet this requirement or whether only those components designated to support accessible features are required to meet this requirement. The discussion mentions items that are outside the scope of a voting system. These should not be included in the VVSG requirements.	

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Principle 7: Marked, Verified, and Cast as Intended

The Requirements in this section seem to be intended to mandate the use of certain best practices and usability requirements. While these best practices can be incorporated into voting systems where possible, there are some instances in which doing so will sacrifice other areas of usability, conflict with other voting system requirements or election needs, and/or substantially increase cost.

One example of this is 7.3-B, which states that, "The voting system must have the capability to display a ballot so that no contest is split into two groups of options." The Requirement continues to mandate that paper ballots must include a way of presenting the contest so that the options are not divided across two columns or pages. While this is certainly an example of a good best practice, there are some situations in which this is simply not possible. In some election contests, there may be up to 200-300 options or candidates, and the voting system must have a way to accommodate those types of situations.

An example of a Requirement that would increase cost substantially is 7.2-N, which mandates system response times that are significantly faster than those that are required by earlier versions of the VVSG. While these faster response times might technically be possible to achieve, they may require more expensive hardware to support those response time without much benefit from a usability perspective, and also present challenges for existing system upgrades due to hardware requirements.

Other comments include areas where there were redundant and/or misplaced Requirements or Requirements that we found to be ambiguous or difficult to measure.

Requirement	Comment	Challenges
7.1-E Color conventions	This requirement is overly restrictive. Although they are good "best practices", they are not hard and fast rules; and therefore, should not be required. These conflict with some requirements given for high and low contrast, and conflict with some general standards, such as using black text for presenting general information.	
7.1-G Text size (electronic display)	This requirement is too ambiguous. We suggest that the points system be removed and replaced by mm measurements.	This will drive a larger display size and have cost implications; the current requirement for large text was 6.3 mm and now 8.5 mm.
7.1-I Text size (paper)	Requirement is unclear.	

	Does this requirement say that the system must support font sizes that are equal to or greater than 10 points, or that the system must ONLY support font sizes that are equal to or greater than 10pt?	
7.1-K Audio settings	7.1-K #4 Should the requirement read "at least 6 discrete steps" here? As written, this disallows having more than 8 steps or having a continuous rate control but does not provide a reason for restricting a voter's level of granularity for speech rate. 7.1-K #5 The requirement should be 50 to 200% of the default rate. There is no way to enforce a specific WPM rate if a system uses human recorded audio.	
7.1-M Audio comprehension	This requirement is unmeasurable and ambiguous. It mandates functionality based on voter abilities that are not quantifiable, rather than mandating specific standards for the system.	
7.1-P Identifying controls	This requirement needs to be limited to voter interfaces only and should include an exception for the shape and color requirement for commonly used hardware such as keyboards.	
7.2-A Display and interaction options	7.2-A #1 Can you please define "enhanced visual options"?	
7.2-C Voter control	7.2-C #5 This requirement is too ambiguous and may disallow ballot rotation.	

7.2-D Scrolling	All requirements under D (except bullet #4) are ambiguous and/or redundant and do not directly apply to scrolling or pagination. **Suggestion** Bullets should not be used to list requirements; please use letters/numbers for easier referencing.	
7.2-H Accidental activation	As written, this requirement is ambiguous and unmeasurable. **Suggestion** Mechanically operated controls or keys, or any other hardware interface on the ACC-VS available to the voter shall be tactilely discernible without activating those controls or keys.	
7.2-N System response time		This requirement could drive more expensive hardware, because of the .1 second response time. VVSG 1.1 required .5 seconds which was responsive enough to provide a good voting experience.
7.2-O Inactivity alerts	7.2-0 #1 This requirement appears to be mixing documentation and logging requirements; additional clarification is needed.	7.2-0 #4 We believe this functionality could negatively impact some voters with severe disabilities.
7.2-P Floor space	This requirement is out of place and does not belong in this principle. This does not support side approach systems. VVSG 1.1 explicitly allowed for forward approach and side approach and did not define which dimension was depth.	**Innovation/Cost** Eliminating support for side approach ballot boxes would result in costly redesign. Side approach ballot boxes allow for ballots to be dropped straight down, rather than mechanically conveying the ballot to the rear or sides of the scanning device.

	Does this apply to all voting stations on just accessible voting stations?	
7.2-Q Physical dimensions	This eliminates a need for "P"; this is a redundant requirement. "Q" is more prescriptive.	
7.2-R Control labels visible	This requirement is out of place and does not belong in this principle. How do you define where voters can see labels for controls? This is hard to measure.	Innovation/Usability This is an overly restrictive requirement; does not allow for the many other ways voters can discover controls, not all controls need to be visible when a voter first approaches the system.
7.3-A System related errors	This requirement is not quantifiable. How does one determine whether the features of the voting system lead a voter to make errors? There should be more specificity.	
7.3-B No split contests	**7.3-B #1** This is not possible in all scenarios, both in real life and in a test lab. **Suggestion** The voting system must have the capability to display a contest within a single ballot column if the contest can fit within a single column. The voting system must have the capability to display a contest within a single ballot page if the contest can fit within a single ballot page.	
7.3-C Contest information	How do you measure "clearly indicate" in this requirement? **7.3-C #3, #5**	

	Seem to disallow presenting this information in non-audio formats. **7.3-C #6** Specifies a location for this information; the location is overly restrictive and does not match current information design best practices.	
7.3-D Consistent relationship	This requirement is overly broad; VVSG needs to callout specific usability problems to be addressed, and specific mechanisms. Different types of contests require different methods of marking and that appears to be disallowed by this requirement. For example, selecting a rank in an RCV contest on an electronic ballot is best done by selecting a number, but this is not consistent with the way you would mark a vote-for-1 contest.	
7.3-E Feedback	This requirement is not measurable.	
7.3-G Full ballot selections review	This requirement conflicts with other requirements in VVSG that appear to mandate review functionality on a scanner. Is this functionality optional or required?	
7.3-H Overvotes	The requirement discussion requires more than the requirement itself. Accessibility for notifications and warnings should be moved into the requirement itself. If voters with disabilities have access to an all-in-one voting	Adding accessible features to the scanner adds cost and could introduce bottlenecks in the polling place, as the scanners will become a chokepoint.

	device, are accessibility features still required on the paper ballot scanner?	
7.3-I Undervotes	Is a configuration in which poll worker approval is required to submit a ballot with undervotes allowed under VVSG 2.0?	
7.3-K Warnings, alerts, and instructions	This requirement is over specified. In cases of system malfunction the voter is not expected to correct the situation and should not be presented with information on the nature of the problem. The voter simply needs to know to notify a poll worker; the poll worker should be presented with information to resolve the problem.	**Cost/Usability** If all system malfunction messages must be transmitted into all voter languages, despite voters not needing to troubleshoot, translation and recording costs will go up significantly.
7.3-M Identifying languages	**7.3-M #2** needs clarification, as there are multiple ways this requirement could be interpreted.	
7.3-N Instructions for voters	Phrasing of this requirement conflicts with the discussion - "must provide voters with instructions for all its operations at any time", seems to disallow contest sensitive help and conflict with sub-requirement #3.	
7.3-O Instructions for election workers	This requirement is not measurable.	
7.3-P Plain language	Troubleshooting a technical issue often requires language that is precise but not plain; there needs to be exceptions for these kinds of situations.	

Principle 8: Robust, Safe, Usable, and Accessible

There are many instances where the regulatory standards referenced throughout this Principle are not specifically defined. For example, the specification ANSI C63.19 referenced in 8.1-J has no specification revision, where the specification typically references a publication date. In another instance the standard is out-of-date and will not be testable when the VVSG 2.0 is released. Specifically, the **safety testing standard referenced in 8.1-K will be obsolete on December 20th, 2020 and no longer acceptable for new certifications for safety compliance in the United States.** These references must be clarified and corrected for manufacturers to target specific requirements during development to prevent ambiguity.

The use of undefined terms is common throughout this Principle. Clear and defined terms are needed to fully understand and appreciate scope and requirement applicability. For example, 8/1-G references "a telephone style handset" in the title, but additionally references "headphone" in the regulatory text? Is a "telephone style headphone" defined by the existence of a t-coil and an RJ-11 style connection to a telephone device, or does this imply that all headsets are to include t-coils?

Lastly, section 8.2-A Federal standards for accessibility is ambiguous in its applicability. Do voting systems meet these requirements with WCAG 2.0 level AA compliance in their accessible devices? Do these requirements extent to the EMS? COTS device interfaces?

Requirement	Comment	Challenges
8.1-F Discernable audio jacks	Measurable ability is a little doubtful.	
8.1-G Telephone style handset	The telephone style headphone is ambiguous; is it made to include standard audio headsets?	Are there headphones with a t-coil?
8.1-H Sanitized headphones	This is an operational requirement and not a system requirement. **Suggestion** The system must be able to accommodate the use of throw away headphones or sanitary coverings, or other means of sanitizing headphones.	There is no way to meet this the way it is written.
8.1-I Standard PAT jacks	The way this requirement is written it includes everything. Please define "voting station device."	

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	8.1-I #2 What is being said here? What does "functionally equivalent" mean? We need clear definitions for the terms that are used throughout, e.g. "voting station device."	
8.1-J Hearing aids	They should reference a specific version of the ANSI C63.19 standard.	**Ambiguous**
8.1-K Eliminating hazards	This standard is obsolete, they should reference IEC/UL 62368-1.	Devices will no longer be able to complete new certifications to the UL 60950-1 standard after December 20th.
8.2-A Federal standards for accessibility	The way this requirement is written it could apply to the EMS. We need more definition on what exactly this applies to.	
8.3-A Usability tests with voters	The referenced text is not an established standard with no version or date; needing to clarify if the referenced document is the correct one.	
8.4-A Usability tests with election workers	The referenced text is not an established standard with no version or date; needing to clarify if the referenced document is the correct one.	

Principle 9: Auditable

Principle 9, Auditable, calls attention to Software Independence, but applies the principle only sporadically. For example, the Requirements hold electronic devices, or DREs, to the strict letter of the Principle, but they appear to leave the practice of placing voter selections in bar codes completely exempt. Per the definition, voter selections encoded in barcodes is not software independent, and in fact voter no opportunity to validate the encoded selections versus their human readable selected options; there are two sources of truth, and therefore which one is to be believed. For Principle 9 to have a meaningful impact on the security of elections, **it must be applied across an entire voting system**.

Also, within Principle 9, End to End Cryptography is recognized as a means to provide software independence. However, the specification imparts undue hardship in bringing End to End Cryptography into an election system with requirements such as multi-year public availability prior to adoption, and new public approval processes to be established by the EAC.

Finally, this Principle includes multiple areas where conflicts are present. One example is requiring both paper records and tamper evidence, when hand-marked paper ballots cannot provide tamper evidence. Another is a requirement is requiring electronic receipts from voting systems, even though voting systems are not allowed to be connected to networks. There are also requirements that potentially conflict with State Laws and Regulations, such as the requirement for unique identifiers on ballots.

Detailed comments are below:

Requirement	Comment	Challenges
9.1.1-A Software independent	As written this requirement is not concise, and ambiguous in that it provides DRE as an example as non-software independence; yet, does not callout voter selections in barcodes as not being software independent. The example provided, selectively chooses a voting type to exclude while ignoring others with the exact limitation. In summary, who defines a voting method's level of software independence?	
9.1.1-B Paper-based or cryptographic E2E system	What "section" or specific requirements?	

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	Paper based architectures do not necessarily define software independence when for example voter's selections are encoded in barcodes, which can't be independently voter verified.	
9.1.2-A Tamper evident records	This requirement needs to distinguish between paper based and electronic records or allow for both. Traditional paper ballots are not tamper-evident; does this requirement exclude traditional paper ballots?	
9.1.3-A Records for voter verification	This requirement is only applicable to precinct-based voting systems. Requirement seems to require a summary screen on precinct scanning devices which introduces both throughput and privacy concerns in a polling place. This is another example that voter selections in barcodes are not voter verifiable.	
9.1.4-A Auditor verification	This requirement is too vague, who decides what these records are? It is not measurable.	
9.1.4-B Auditable with compromised software, firmware, or hardware	The production of tamper evident records DOES NOT protect against this scenario. How do you meaningfully audit with tampered records? How do you test this? A compromised system can be detected, but once compromised auditability is untrustworthy.	How do you measure or test this requirement?

9.1.4-C Documented procedure	This requirement is too vague. Please clarify; if the intent is for vendors to recommend audit procedures in documentation, it should be stated as such in the Requirement.	
9.1.5-A Paper record production	This is ambiguous, who is responsible for independent verification? Is this targeted at the voter or election official? A voter for example, cannot independently verify voter's selection encoded in barcodes.	
9.1.5-C Paper record intelligibility	How are voter selections in barcodes meeting this requirement? Even if the barcode is publicly specified (different requirements in VVSG), a voter can't "map" a selection code to written text without some type of code to ballot legend. This is another example of conflict of software independence with voter selections in barcodes.	
9.1.5-E Paper record transparency and interoperability	There is no such thing as an interoperable format for paper records in elections. Mandating paper record interoperability is overreach. Ambiguous as the requirement should define the specific format to be applied. This discussion is misplaced and should be placed in Principle 4 Interoperability.	
9.1.5-F Unique identifier	Illegal in some jurisdictions.	

	Suggestion: The system must be capable of including a unique identifier on the paper ballot.	
9.1.5-G Preserving software independence	Suggestion: After a voter REVIEWS their ballot, the voting system must not physically be able to print in the area where the voter's ballot selections reside.	
9.1.6-A Cryptographic E2E transparency	The requirement requires using a process for review that is undefined. What constitutes an open review? What constitutes the requirements to fulfill an open review other than time?	This Requirement, by mandating a two-year process for approval, will have a negative impact on time for manufacturers to develop and market VVSG 2.0-compliant systems.
9.1.6-B Verified Cryptographic Protocol	This mandates the EAC to establish and implement a public process that does not currently exist and will delay the implementation of these standards. That process is currently undefined and which does not address the questions of who is responsible for setting criteria or for the evaluation.	
9.1.6-C Public availability of E2E cryptographic protocol implementation	This requirement is in conflict with established "defense in depth" principles. Additionally, any E2E implementation is likely to be interwoven with the software itself and hard to separate for public review.	
9.1.6-F Ballot receipt	There is no such thing as an interoperable format for this. Mandating receipt is overreach, and it is not clear how a system that is not allowed to be connected to a network can provide an electronic receipt.	

9.1.7-A Number of ballots to check		Scope This should not be the responsibility of the voting system manufacturer. This is a policy decision that should be made by the jurisdiction using the voting system. The voting system should be flexible enough to support audits but should not be involved in defining audits.
9.1.7-B No fixed margin of error		Scope This should not be the responsibility of the voting system manufacturer. This is a policy decision that should be made by the jurisdiction using the voting system. The voting system should be flexible enough to support audits but should not be involved in defining audits.
9.1.7-C Random number usage	This requirement is misplaced and should be placed under a more appropriate section such as Principle 2.	
9.2-A Compliance audit procedures	This requirement is ambiguous. Documentation must describe the functionality needed to support a compliance audit. The voting system should not define audit procedures. These should be defined by the jurisdictions conducting the audits.	
9.2-B General post-election audit procedures	This requirement is ambiguous. Documentation must describe the functionality needed to support a post-election audit.	

	The voting system should not define audit procedures. These should be defined by the jurisdictions conducting the audits.	
9.2-D Reporting intermediate results	Requirement is incomplete as "intermediate results" is not defined.	
9.2-E Reporting unusual audit events	The voting system should not be responsible for evaluating the success or failure of an audit. This should be the responsibility of the jurisdiction conducting the audit.	
9.2-F Reporting format	Needs to clarify what is being documented by whom.	
9.3-A Data protection requirements for audit records	Please refer to 13.1 and 13.2.	
All of 9.4 should be combined with the previous section to avoid redundancy.		
9.4-A Efficient compliance audit	There is no quantifiable way to measure what is and what is not efficient.	
9.4-B Efficient risk-limiting audit	There is no quantifiable way to measure what is and what is not efficient.	
9.4-C Unique ballot identifiers	Please see our responses from "unique identifiers."	
9.4-D Multipage ballots	What is "appropriately manage," how do you quantify it?	

Principle 10: Ballot Secrecy

Principle 10 covers ballot secrecy and attempts to provide Requirements that protect the secrecy of voters' ballots. We wholeheartedly agree with the intent of this Principle, but several of the Requirements introduce uncertainty because they can be interpreted in multiple different areas, address features that are traditionally outside the scope of a voting system, or leave open to interpretation whether other requirements in different Principles are mandatory or optional.

For example, Requirement 10.2.1-B – Indirect voter associations, states that, "Only paperless systems may use indirect associations; other systems must not." However, the discussion in Requirement 9.1.1-A – Software independent, states, "One example of a software dependent voting system is the DRE, which is now non-conformant to this version of the VVSG."

Additionally, there are cases in which requirements are written in a way that is overly restrictive, which could lead to unnecessary implications to cost or development timelines. One example of this is 10.2.1.E – Isolated storage location, which states that, "Ballots that are not cast and contain an indirect association must be stored in separate storage locations from cast ballots." While the intent of this requirement may be that ballots still under consideration can't be inadvertently included in results, it does not leave manufacturers options for how this is addressed. Rather, it unnecessarily mandates a certain type of design and architecture.

Specific comments related to this section are below:

Requirement	Comment	Challenges
10.1-A System use of voter information	While we do not object to this requirement the exceptions are outside of the voting system in VVSG.	
10.2.1-B Indirect voter associations	It is unclear whether this requirement applies to all voting systems regardless of whether they employ E2E voting system architectures or not. This requirement would disallow the use of paper ballots for provisional voters or retrievable ballots, leaving paper-based systems non-compliant with either VVSG or HAVA.	
10.2.1-C Use of indirect voter associations	This requirement could be interpreted so that direct associations are not allowed in this situation or it could be interpreted so that indirect	

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	associations may only be used in situations when the voter needs to fill out a ballot before their eligibility has been determined. **Suggestion** The requirement to strip associations before casting should be its own requirement and not just be discussed within the discussions.	
10.2.1-D Election worker selection of indirect associations	This requirement does not consider recallable ballots. For recallable ballots all early voting ballots must be marked with an indirect association. Requiring the election worker to select the option each time would introduce usability problems and human error.	
10.2.1-E Isolated storage location	This requirement is overly restrictive and mandates the design.	
10.2.1-F Confidentiality for indirect association	This requirement is overly restrictive it reduces auditability.	
10.2.2-D Non-memorable identifiers and associations	This requirement is not measurable, it does not protect against the threat it is trying to mitigate. Small portable cameras are abundant, and the voter will not necessarily need to use their memory. This also makes unique identifiers less usable for election officials.	
10.2.2-E Aggregating and ordering	What is the definition of "voter specific information"? Does this include unique write-ins entered by a voter? Situations where only one voter voted in the precinct? or just "information identifying a voter" as used in previous requirements?	

10.2.2-F Random number generation	Using "guidance from" is ambiguous and open to interpretation. **Suggestion** This requirement is misplaced, and Principle 2 is more appropriate.	
10.2.3-A Least privilege access to store	Memory location cannot be subject to the principle of least privilege; however, a system can protect access to the memory location. This requirement should be re-written from a system perspective.	
10.2.3-B Limited access	This requirement is unmeasurable.	
10.2.3-C Authorized access	This requirement reduces auditability and transparency. Assumes a specific system design and cannot be applied to removable media without embedding software on the removable media.	
10.2.3-D Digital voter record access log	This requirement is unnecessary.	Cannot be applied to removable media without embedding software on the removable media.
10.2.4-C Logging of ballot selections	The discussion seems to be concerned with releasing non-public data to the public; however, after tabulation aggregated ballot selections are public data.	
10.2.4-D Activation device records	Please define what an "activation device" is. Does this mean voting session start and end cannot be logged?	

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Principle 11: Access Control

Hart fully agrees with the principle of strong access control and the general requirement to adhere to best practices, such as *ANSI INCIS 359-2004, American National Standard for Information Technology - Role Based Access Control*. Unfortunately, many of the requirements in this section are overly prescriptive. These requirements try to define a specific implementation which hinders innovation and flexibility. Often, this flexibility allows a single voting system to meet the disparate needs of multiple jurisdictions with conflicting use procedures dictated by local statute.

For example, the voter role, as mentioned in 11.2.2-B, should not exist. The voter is not a credentialed user to which the role can be assigned. Other required roles may hold more permissions than a jurisdiction wants for that role, violating the security principle of least privileges. Lastly, some operations exist in multiple stages and cannot be truly controlled by RBAC permissions, such as powering on or off (button pressed, or plug pulled).

VVSG 2.0 is better served requiring adherence to RBAC and other access control best practices without prescribing implementation details. This approach will allow the industry to innovate and meet customer needs while maintaining a strong security posture.

(In general section 11.2 is highly prescriptive and leaves little room for innovation.)

Requirement	Comment	Challenges
11.2.1-C Access control by voting stage	This requirement is overly prescriptive and assumes that all systems and all jurisdictions are organized in the same manner.	This requirement hinders flexibility in meeting the needs of each jurisdiction. It assumes certain separations that may be inappropriate for the circumstance. To a specific requirement, "powering off" there is no way to effectively control that through RBAC considering hard shutdowns (pulling the plug).
11.2.2-B Minimum groups or roles	The voter is not a credentialed user. This requirement is overly prescriptive and assumes that all systems and all jurisdictions are organized in the same manner.	This requirement hinders flexibility in meeting the needs of each jurisdiction. It assumes certain separations that may be inappropriate for the circumstance.
11.2.2-C Minimum group or role permissions	The voter is not a credentialed user.	This requirement hinders flexibility in meeting the needs of each jurisdiction. It assumes certain separations that may be

	This requirement is overly prescriptive and assumes that all systems and all jurisdictions are organized in the same manner.	inappropriate for the circumstance.
11.3.1-B Multi-factor authentication for critical operations	Requirement states "deleting or modifying the audit-trail". The audit-trail is required to be immutable and not deleted or modified on command.	**Cost** It will increase cost to the system to add multi-factor authorization to voting devices.
11.5-A Access time period	The requirement and the discussion do not match.	

Principle 12: Physical Security

Physical security is paramount, however the implementations described in this Principle are highly prescriptive and introduce new requirements that add significant cost and maintainability challenges. For example, UL 437 compliant locks are not widely available in a form factor suitable for incorporation into a voting device, and those that are available are at a significant cost premium. The design needed to support the alarm capability requirements described in section 12.1 quickly snowball into a Rube Goldberg solution that increases cost and complexity, which then serve to drive up failure rates, false alarms mitigations, maintainability, and safety concerns, given the addition of batteries that would be needed the support the requirements of 12.1-I. Tamper seals, locks, and tape, when properly vetted for the material, application, and judiciously applied, are a proven solution in the voting industry.

There are many instances throughout the Principal regulatory text that specify "Voting System" when the discussion that follows indicates the applicability to apply to the "Voting Device," for example in 12-1-D, 12.2-B, and 12.2-C. Hart suggests a change to "Voting Device" in these instances, to exclude applicability to the EMS, which is not used by voters or poll workers, and is found in a controlled and secure environment.

Requirement	Comment	Challenges
12.1-B Unauthorized physical access alarm		Cost Adding alarm capabilities to restricted device components will add cost to the voting devices as sensors will need to be added.
12.1-C Disconnecting a physical device		Cost Adding alarm capabilities will add cost to the voting devices as sensors will need to be added.
12.1-D Logging of physical connections and disconnections	How does the voting device connect to the voting system? Does this requirement apply to the EMS workstations in addition to the voting device?	Cost Adding alarm capabilities will add cost to the voting devices as sensors will need to be added.
12.1-E Logging door cover and panel status	Does this requirement apply to the EMS workstations in addition to the voting device? For example, the COTS workstations used in the EMS as part of the voting system do not	Adding alarm capabilities will add cost to the voting devices as sensors will need to be added.

	typically include door covers and panel status.	
12.1-G Secure physical locks	12.1-G #2 There is no definition of "physical indication" or a number of "attempts".	Cost UL 437 locks will significantly add costs to the system. As to the second sub-requirement, there may be no solution to meet this requirement, as a lock cannot track a picking attempt for example.
12.1-H Secure locking system key	Does this requirement apply to the EMS workstations in addition to the voting device? For example, the COTS workstations used in the EMS as part of the voting system do not typically have locking systems.	
12.1-I Backup power for power-reliant countermeasures	Requirement is not clear on which alarms must have back-up power. Also, alarms could potentially be triggered when the voting device is powered off and no logging is available.	Cost/Maintainability Adding back-up power increases requirements for batteries in the system which will increase cost and ongoing maintenance requirements.
12.1-H Secure locking system key	Does this requirement apply to the EMS workstations in addition to the voting device? For example, the COTS workstations used in the EMS as part of the voting system do not typically have locking systems.	Regulatory As currently defined, the EAC would potentially have to approve a new keying scheme with each change, as it would be a part number change against the certified system.
12.1-I Backup power for power-reliant countermeasures	Requirement is not clear on which alarms must have back-up power. Also, alarms could potentially be triggered when the voting device is powered off and no logging is available.	Cost/Maintainability Adding back-up power increases requirements for batteries in the system which will increase cost and ongoing maintenance requirements.
12.2-B Physical port auto-disable	Is this requirement referring to the "voting system" or "voting device"?	Usability

		Puts an undue burden on poll-worker when resolving the issue.
12.2-C Physical port restriction	Is this requirement referring to the "voting system" or "voting device"?	
12.2-E Logging enabled and disabled ports	Discussion reference error: Are you referring to 12.2-D? There is no 12.2-F to reference. "-whereas 12.2-F discusses logical disabling of ports."	

Principle 13: Data Protection

Requirement	Comment	Challenges
13.2-C Cryptographic verification of electronic voting records	**Suggestion** Please remove the words "be able to": *"The EMS must cryptographically verify all electronic voting records."*	

Principle 14: System Integrity

Hart fully supports the stated intent of Principle 14, *ensuring that the voting system provides redundancy against security failures, limits its attack surface, maintains and verifies the integrity of all critical components, and authorizes all software updates before they are installed*. Unfortunately, this section contains a significant number of ambiguous, untestable, or contradictory requirements. As mentioned in the opening section, good requirements are paramount to reducing both the time and cost associated with creating a compliant voting system that meets industry needs.

Also, logging boot validation failures is not always feasible. Any voting system that integrity checks the BIOS and firmware immediately upon power up will not have logging capabilities available. Attempting to log after that would require logging from a known, compromised system. Those logs are suspect and cannot be relied upon.

Requirement	Comment	Challenges
14.2-D Network status indicator		EAC should consider State requirements for wireless transmission of preliminary results.
14.2-E Wireless network status indicator	This requirement conflicts with 14.2-D.	
14.2-I Unused code	How is this requirement testable?	
14.2-J Exploit mitigation technologies within platform	What is the definition of "underlying platform"? For discussion, it is understood that most high-level operating system utilize exploit mitigation; however, what if the underlying platform incorporates microcontroller technology that does not include such support?	Microcontroller technology support and the lack of operating system functionality. For example, an embedded task loop within an MCU.
14.2-L Importing software libraries	How is this testable? Who determines what is practical?	
14.2-N Known vulnerabilities	What constitutes a "well-known" vulnerability?	

14.2-O List of known vulnerabilities	1) In conflict with 14.2-N. 2) What is the process for the certification authority to determine a "well-known vulnerability" is allowed?	
14.3-B Criticality analysis	A lot of additional process with no new benefit defined. Stated goal already addressed by 14.1-A Risk assessment documentation and 14.3-A - Supply chain risk management strategy	
14.3.1-C Logging of verification failure	Requirement does not account for validation prior to logging capability. For example, hardware-based validation of boot components.	If the system boot fails validation, then the system is technically compromised. As a compromised system, how can any new log entry be trusted?

Principle 15: Detection and Monitoring

Hart strongly agrees with the need for strong, robust malware protection. However, these requirements are written with the expectation that malware protection is black-list centric (signature definitions or heuristic rules). That is to say, the malware must first detect a threat before it can respond. Because of this perspective, VVSG 2.0 also requires malware protection features to allow for regular updates and basic management in order to handle new threats. Hart recommends malware protection requirements be written such that update, detection, remediation, and logging requirements only apply to malware protection relying on signature definitions or heuristic rules. Many of these requirements are inappropriate for a default-deny, signature-based, whitelisting system. Any ability to change the configuration can only weaken the voting system's security posture.

Similarly, there are networking related requirements that are potentially inappropriate for the voting system, namely mandating firewall settings be configurable. If the firewall is already configured to block all unnecessary ports and protocols for the voting system, there is no need for further configuration. Exposing that capability would weaken the security of the system instead.

Lastly, logging all integrity checks is not feasible. As mentioned in Principle 14, logging capability is not always available when an integrity check is made. And, any associated log will quickly become bloated for whitelisting applications that validate an executable every time it is loaded for execution.

Requirement	Comment	Challenges
15.2-C Logging errors	Per IEEE best practice the word "all" should not be used to define the bounds of the requirement.	
15.3.1-A Malware protection mechanisms	Requirement should define which COTS components must deploy malware protection mechanisms. For example, is this requirement targeting EMS COTS workstations, or is it also targeting connected COTS devices such as printers?	
15.3.1-B Updatable malware protection mechanisms	Requirement contradicts 15.3.1-A. This requirement mandates the ability to update on vote capture and tabulation without a requirement that malware protection be on vote capture and tabulation.	

15.3.1-D Notification of malware detection	Requirement should define which COTS components must deploy malware protection mechanisms. For example, is this requirement targeting EMS COTS workstations, or is it also targeting connected COTS devices such as printers?	In a default-deny configuration, whitelisting does not distinguish between malware and benign, unauthorized executables.
15.3.1-F Notification of malware remediation	Requirement should define which COTS components must deploy malware protection mechanisms. For example, is this requirement targeting EMS COTS workstations, or is it also targeting connected COTS devices such as printers?	
15.4-B Secure configuration documentation	What constitutes "relevant"?	
15.4-D Firewall and IDS		Why is this "may" instead of "must"?