Peter Kosinski: Alright we'll call the meeting of the State Board of Elections to order. I am Peter Kosinski here on my left is Commissioner Spano, we have Commissioners Kellner and Peterson on video today. And today's meeting, we're not going to do the minutes from the last meeting but we're going to just take up one agenda item which is the approval of an electronic poll book system from NTS. And we have before us a proposed resolution to adopt the poll book system and also a report from the staff regarding the system itself. So, I'd open it up if there're any questions, comments or motions, I would entertain them at this point. Commissioner Kellner I believe you'd like to speak.

Commissioner Kellner: Thank you. So I have several questions for Tom Connelly and Brendan Lovullo but I want to preface it by saying that I, and I believe that the staff are very much aware of the concerns raised by the NTS connection with VR systems particularly in light of the questions raised about the impact of potential security threats to VR systems on the 2016 election in North Carolina where electronic poll books were compromised in Durham County. And so I have reviewed a lot of the public reports with respect to that and have given special attention to reviewing the security aspects of the staff review of the NTS E-poll book system to make sure that it is not subject to compromise in a way that we should be concerned about. I also note that in reviewing the technical data plan that was submitted by NTS that there are several features that are optional features that are not included in this system. They don't affect a consideration on whether we should approve the system or not, but it certainly should be something that potential county purchasers should be aware that those options aren't included in this particular E-poll book system.

To turn to the questions, the first question I have is what has happened since our last Commissioner's meeting and today to revise the NTS submission so that it is now recommended for approval.

Tom Connolly: Okay well to address that as we had done a review of the five systems that were submitted to us, we had recommended 3 prior for approval. At that time, the system that was submitted by NTS was not being recommended because it had not met at least about a dozen of different requirements that we had set forth. Some of them in the functional aspect of requirements, some in security. With regard to what those included it could have been anything from something as somewhat benign as displaying the date of the election on every screen up to more security considerations like it was lacking multifactor authentication on the backend. There were issues around password complexity. Some of the encryption of system credentials and the ability to kind of removal electronic poll books from the service on the fly if it was necessary. Since that time, we've had a number of conversations with NTS about those requirements. They did make a number of code changes. They then submitted that change code to us for review. We did basically go back through the entire process where we had our security consultants scan the hardware and the software components of the system as if it was a brand-new system being reviewed. We did have them come in again for a full day in-person demo to demonstrate their system's compliance with all of the various requirements. We ensured that they provided any and all documentation that we felt was necessary to show that

their system was complying with any documentary requirements. And it was after all of that that we felt that the system as it stands now and as it's before the Commissioners for approval, does meet all of the requirements that we promulgated.

Commissioner Kellner: Great, that's helpful. My next question was to turn to §2.1 on the NYSTEC review of the security and at the end of the first paragraph NYSTEC says that there are possible issues that are application dependent and need to be reviewed in context with the application for a decision on whether they should be addressed. If any are deemed an issue that should be corrected, the vendor should be able to fix each easily. So, I just wanted to ask for your understanding on what that means and how that jives with the conclusion that there are no significant security issues in the current presentation.

Tom Connolly: Sure. So, that report showed that there were no higher critical vulnerabilities that were found during their testing or their scanning. With regard to some of the items that you mentioned, there are obviously on any sort of system a number of ports that are used for network traffic. As kind of a best practice when it comes to security, any port that isn't really being used should probably be locked down, so it doesn't leave an open window somewhere. With regard to the NTS system, there was a port that was found to be open and NYSTEC had asked in their report that we go back to the vendor to determine whether or not that open port served a business purpose for the application. As you mentioned, they said sometimes these things that come up are application dependent. In the case of NTS, the port that was found to be open was indeed being used for a business purpose. It was allowing the sideways communication between multiple poll book devices within a poll site. So therefore, it was not deemed to be a vulnerability since it was necessary for the proper use of the system.

Commissioner Kellner: Okay I think that does address the concern. And then finally, this system, like the other three that we approved at our last meeting all use cloud service that the vendor controls for holding the electronic, e-poll book records that are used at the poll site through the electronic poll book. Could you just comment on the security issues that are raised by using the cloud for that data?

Tom Connolly: Sure, so, I guess some of the concerns with regard to using the cloud for the holding of data is that, one is, I guess, you could conceivably say relinquishing physical control of the data because it's somewhere in the cloud. However, in order to protect that information, our requirements mandated that the information that resides in the cloud not just at rest but also when it's in transit between the different components of the system are encrypted so that information is protected. In addition to that, the backend systems for the four systems, well the three systems that have been approved and including this one that's up for approval today, one of our requirements is to ensure that there is multi-factor identification in order to get access to that information, so that it doesn't just require a username and password to get in, it requires, in the case of this system, usually would be the possession of a cell phone so that you would have to get either a link or code that you would have to prove that you are indeed who you say you are when trying to access that information. I know there has been also some discussion

about the potentiality of the cloud being connected somehow to the other components of the voter registration system whether it be at the local level or at the state level, but that again was one of our requirements that no system could have any direct connection to any other election system. So, the information has to be first exported from a voter registration system and then manually imported into an electronic poll book system and vice versa when you're exporting information from an election to pull it back into a voter registration system.

Commissioner Kellner: And I guess I want to emphasize that point, which is that the electronic poll books download data from NYSVoter, but they cannot change the data that's contained within NYSVoter. Correct?

Tom Connolly: Right, they can consume information from NYSVoter. They have no ability to access NYSVoter itself in order to download anything. That still requires the manual intervention of county board staff or state board staff whether it be from NYSVoter or from a local voter registration system itself.

Commissioner Kellner: And when you update the voter history on NYSVoter you're using data that comes from the electronic poll books, is that correct?

Tom Connolly: Yes, so the voter history information that would come from an electronic poll book system at this point I'm not aware of any voter registration system in use in New York that can import a data file. So although that may be something that can be done in the future, which would certainly make the transfer of information a lot quicker and more efficient, at this point, it was still our belief that at a bare minimum an electronic poll book system would have to be able to generate a printed report in which county board staff could then scan the barcodes which represented voter IDs of voters who had checked-in during the elections process that would then give voter history credit to that voter in their local system and then that local system, as it has always done, will then send that information up to NYSVoter.

Commissioner Kellner: So right now, even if there's a virus in the E-poll book data that provides voter history, that would still be segregated out because of the need to separately scan the results before it goes into the updated voter history in NYSTEC or in NYSVoter, right?

Tom Connolly: That is correct.

Commissioner Kellner: Okay well, those are my questions and I'll just say that as I said before that we've carefully looked at this and I feel comfortable that this system as well as the other three are worthy of our approval and while we're aware of security risks, the advance of having an electronic poll book outweighs the minimal risks that have been identified so far.

Commissioner Kosinski: Okay thank you. Are there any other questions before we entertain a motion?

Commissioner Spano: I move that we adopt the motion.

Commissioner Kosinski: I have a motion to adopt. Is there a second?

Commissioner Kellner: I'll second.

Commissioner Kosinski: We have a second. All in favor? (Chorus of ayes) Opposed? I hear four ayes, so I believe that's unanimous. So that's the only business we have for today. Before we leave just a couple, I guess almost housekeeping issues. So, there were five vendors I believe that submitted systems to us for approval, we have now approved four. What's the status on the fifth?

Tom Connolly: Similar to the process that we followed with NTS, there were a number of requirements that we identified that the fifth system had not or has not yet shown compliance with. We continue to work with that vendor. We actually have a phone call with them this afternoon to discuss some of the outstanding items that we feel are still in that gap before you can actually get to compliance, if you can get to compliance, and we will continue to work with them to try to see if their system can and if their system can and if so we would then bring them for recommendation for approval at a future meeting.

Commissioner Kosinski: But you don't have a timeframe right now?

Tom Connolly: At this point we do not.

Commissioner Kosinski: Secondly, so now that we've approved these vendors, they would go on state contract for purposes of purchase by the counties? What is the status of that? When is that going to be done and set for counties to buy off?

Todd Valentine: The contract is out for the vendors to respond to now. Their bids and responses are due back on July 16th in which case, and a vendor that comes later can be added later in which case we expect to have the contract available for counties to use on August 1st.

Commissioner Kosinski: So, in the meantime, counties can do their own purchase of any one of these four? They can use a local county contract or some other mechanism to get the, because August 1st is pretty late so I'm just thinking counties are going to want to move quicker because they've got to use these this fall, and they won't want to wait. So, you're hopeful for August 1st, you don't know. that's the earliest you would expect the state contract is that correct?

Todd Valentine: That's what they said.

Commissioner Kosinski: That's what they said, okay. So right now, counties can purchase any one of these four for use this fall, though.

Todd Valentine: Right and we will advise the counties that NTS is being added to the list of available vendors.

Commissioner Kosinski: That's all. I just wanted to clarify that. Does anybody have anything else before we entertain a motion to adjourn? I hear nothing else. I'll entertain a motion to adjourn.

Commissioner Spano: So, moved.

Commissioner Kosinski: Second it. All in favor? (Chorus of ayes) And we will stand adjourned until our next meeting July 25th. Okay thank you. Alright commissioners.