# Town of Groton, MA Electronic Voting (EV) Study Committee (EVSC)

# Minutes of the Meeting of August 11, 2022

## Opening

Location: via Zoom

The meeting was called to order at 6:01 pm by Mr. Petropoulos. Mr. Petropoulos informed all present that the meeting was being recorded. Mr. Petropoulos asked each member of the Committee to introduce themselves, which they did.

Present: Michael Bouchard, Michael Manugian, Jack Petropoulos.

Absent: Robert Anctil, Carolyn Perkins

## Public Comment Period

No public comments were made during this period.

## Approval of Minutes

A motion was passed by unanimous role call vote to accept the Minutes of the Meeting of July 28, 2022 as submitted.

Note: The minutes of the public hearing of August 4, 2022 will be reviewed at the next EVSC meeting.

## Public Hearing Review

We will follow up with Michael McCoy on his request for public voting and voting confirmation. Mr. Petropoulos heard from two other people that they wanted to be able to see how others voted at Town Meeting.

## Meridia

Meridian was represented by Mr. Sean McPeak and Mr. Peter Babel. Forty-five towns in MA use Meridia. By year end they expect this to be 70-75.

Their software includes a PowerPoint add-on as well as a stand-alone application.

The system can be set up to so that the Moderator can see the result first. This had been requested by our Moderator. Meridia recommends that people use a dedicated laptop in airplane mode (no Internet or Bluetooth connectivity) This provides maximum security from intruders. It is possible to set specific pass/fail percentages for each motion. They recommend setting a general rule and then entering the exceptions for individual motions as needed.

An advantage of using their clicker is the fact that it has three color-coded buttons labeled Yes, No, Abs. It is also possible to include private labelling and eliminate all buttons except yes, no, and abstain. Many towns have simply yes and no. The clicker displays visual confirmation of the last vote entered plus confirmation that it was received by the voting computer. Only two towns, Hamilton and Carver, register voter to keypad. It is possible to display all individual votes by keypad. Most towns keep individual voting anonymous. In any cases, the actual vote is only shown only after the moderator closes the voting period. Live counts of the number of votes received so far can be shown during the voting period, but yes/no vote totals are displayed only after the end of the voting period.

These clickers communicate with the receivers via 2.4 Ghz band radio. The system does not require internet or Bluetooth. This system is used by the US House of Representative and the US Dept of Naval Warfare. The range is generally limited to inside a meeting room. Even if someone inside the Town Meeting room can capture the radio signal, the system has a security protocol that prevents local hacking. It is technically possible for an individual to effectively stop the system by operating by overwhelming the 2.4 Ghz radio band. If this happened, it would be clear that the system was non-functional, and the customer could go back to manual voting.

The system can be configured to disable lost clickers or clickers obtained from other sources for nefarious purposes. Each clicker can be married to a receiver. Some towns operate in a promiscuous mode (receivers respond to any clicker) so they can borrow from another town. The customer or Meridia can associate or dissociate receivers to/from clickers with the available software.

Meridia is willing to do a demo if we wish or can send a demonstration presentation.

It is possible to add new motions such as a motion to end debate quickly.

For testing purposes, it is possible to show on a screen the correspondence between each clicker number and the test vote entered. It is possible to display this grid at the start of Town Meeting to test all the clickers, then remove this display for subsequent actual votes.

It is possible to easily amend the text of a motion during a meeting. They recommend replicating the motion, then adjusting the text. That way if the motion to amend fails, the original text is still available.

Software and support for the life of the system are included in the original cost. The optional $495 annual support subscription is available if a customer wants to obtain upgraded software, but is not required.

It takes .5 seconds or less for the system to read 600 clickers. The recommend that the voting period remain open for one minute for an audience of 600.

Although the proposal did not include it, Meridia agreed to warrant the equipment for 10 years in writing at no additional cost. They also agreed to respond to additional questions via email.

## Turning Technologies

Turning Technologies was represented by Ms. Sonel Friedman, who began with a brief presentation

Turning Technologies also uses radio frequency communications between the clickers and receivers.

Questions can be anonymous or tied to an individual.

The system includes a floating toolbar shows a count of the live number of responses received so far during voting. Display of this live count is optional and controlled by the computer operator

Town Meeting is < 15% of Turning Technologies’ business. Their system can handle up to 2,000 clickers. The operator can insert or delete motions via the floating toolbar. The system displays when polling is open and closed. Polling remains open until closed by the operator. The system can export results by question.

Security: As with the other vendors, radio frequency communication is used between the clickers and receivers for security. To her knowledge their system had never been hacked since its inception in 2002. This system has received a security designation which makes it allows its use by the US Navy and Marine Corps.

They recommend designating one person to run the voting system. They recommended preload all motions to save time. Their software is a PowerPoint add-on. This PowerPoint software is free and downloadable. Use of their system requires a 12-month annual subscription for each year of use. This subscription provides tech support and training. Mr. Petropoulos indicated that the cost of this support (from their quote) was $3,000 per year.

Clickers are in stock and can get delivered in 3-5 business days. Associated licensing (for the use of each clicker) can be obtained in 24 hours. Each receiver can handle 2,000 clickers.

There are three software options including a PowerPoint add-in, or polling over any other application.

They are constantly updating to stay in sync with Microsoft.

Mr. Friedman could not tell use whether a clicker can provide a non-visual indicating of the vote selected for a visually impaired person. She offered to email an answer to Mr. Petropoulos. Note: After the meeting a response was received indicating that this was not possible.

Turning Point owns the hardware which only works with their clickers and receivers.

The system can be used outdoors. Outdoors a concern is the amount of other radio frequencies traffic that could theoretically interfere with communications. Clickers and receivers should be within 200 feet of each other. Receiver failure is rare.

Ms. Friedman indicated that the system could read 600 clickers immediately.

Each clicker displays the voting option selected and a green light to indicate that the vote has been processed by the receiver.

Each voting card has 12 buttons. It cannot be simplified.

Ms. Friedman seemed to indicate that any receiver could read any clicker. If a clicker were borrowed from another town, it would be necessary to buy an additional license for that clicker. She was unable to explain how you could disable a lost clicker.

## Option Technologies

Option Technologies was represented by Mr. Mark Fite. From 1985 this company only products have been to support meetings. Their first Massachusetts Town was Wayland in 2010. They are now in their fourth contract cycle with Wayland. They support a total of eight open town meeting towns.

When they surveyed their customers and asked why they decided to go with electronic voting the answers in order of highest to lowest votes were 1. Voting Privacy, 2. Speed and Accuracy, 3. A More Positive Environment. Mr. Fite felt that the more positive environment was the result of eliminating some of the shouting involved in some manual voting.

They recommend having a voting computer and a backup computer. Some towns only show the results of the vote to the moderator who subsequently announces the vote to attendees.

The system can deactivate lost or stolen clickers. They have a help desk.

It is possible to perform individual random audits. The system can display how each handset voted for testing. He recommended displaying no more that 60 individual votes at a time so that they could be easily read by all attendees.

OptionPower is their PowerPoint add-in. Their Delegate Voting Module has special tools such as showing votes by device. Both are included in their proposal.

They support other modules. For example, their Vvoter software supports remote voting at TM should the Massachusetts General Court make this a legal option. This software option is not included in their proposal.

All data goes into an SQL database.

They support five different models of clickers. The version associated with the Groton proposal is a card-style clicker.

Each receiver supports up to 400 clickers. The Groton proposal includes larger receivers with outboard antennas for greater range. They recommend use with ethernet rather than USB to provide more flexibility in receiver placement. All clickers are numbered and come with lanyards. Smaller clickers go missing more frequently than larger ones, but generally, very few are lost.

Their proposal includes some braille-labelled clickers. None of their clickers provide a non-visual presentation of the vote selected. If an audible or haptic response is desired for a visually impaired voter, this can be accomplished with additional components (not included in this proposal). In addition, this requires using an intelligent device such as a phone or tablet and requires that these devices be interfaced to the voting computer via wi-fi. Adding wi-fi lessons the security of the voting computer.

The system can display a count-down timer during the voting period. The display of results can be toggled between counts and percentages. The system can be configured to count abstentions, if desired.

They recommend entering a set of move the question motions to save motion-entry time during the meeting. New motions can be added at any time.

This system uses encrypted radio frequency communications whereby each clicker is coded to a particular base (receiver) channel. The system can enable or disable individual clickers. No internet or Bluetooth is required. They recommend that the voting PC not be connected to the internet.

Most towns contract for support for a specific length of time. The typical term is a 3-year contract for support/training. They are now going to a 5-year term. They are willing to go to a 10-year term for support and equipment for Groton.

The system can set a quantum for pass/fail for each individual motion.

Although it is possible to display the entire text of motion, they don’t recommend this. They suggest it is better to display the motion and supporting information on a separate computer from the voting presentation. Displaying just the Article or motion title on voting screen results in less voter confusion.

He contrasted the capabilities of a remote vs. a card clicker. Typically, the larger device has a greater range. The larger device can also have personalized labelling.

It is possible to rent additional handsets if a very large attendance is predicting for a particular meeting.

This system can be used outdoors. Nantucket had 1074 voters outdoors in large tents. It was necessary to carefully manage the receivers. They put a receiver in each tent. Outdoors, receivers are subject to additional radio interference.

Some towns have had failures indoors and out with handsets. The devices operate on the 2.4 Ghz band (which is shared with Wi-Fi and Bluetooth devices). They use spectrum analyzers for large projects to ensure that there is no significant radio interference.

When they provide an onsite for a meeting, they always provide redundant computers and base stations. The Groton quote includes two base stations and two additional backup base stations.

There is no additional cost beyond the amount in the quote. It includes all equipment, software and support, and a hardware warranty for 10 years.

## Committee Review of Presentations

The committee agreed to defer discussion of the vendors until the next meeting when Ms. Perkins and Mr. Anctil are expected to be present.

Mr. Petropoulos felt it was important to have a clear, simple explanation of radio frequency security and management for voters.

Ms. Anderson (guest) felt it would be beneficial to have a presentation from Meridia like the one from Option Technologies. She felt the latter was easier to follow.

ACTION: All: Review the vendor packages and the information presented in this meeting and decide whether we want our recommendation to include a recommendation of a particular vendor.

ACTION: Mr. Petropoulos: Ask Mike Chiasson, Groton IT Manager, to review RF security to explain it to the committee.

## Closing

Mr. Petropoulos noted that he was unavailable for meetings during the first two weeks of September.

The meeting was adjourned at 7:59 pm.

The next meeting will be on August 18, 2022 at 6:30 pm via Zoom to be posted by Mr. Bouchard on the Town of Groton website with the meeting agenda.

Respectfully submitted,

Michael Manugian, Clerk