# TOWN OF ARLINGTON MASSACHUSETTS

# #17-46 Invitation for Bids

The Town of Arlington, Massachusetts (the Town) acting through the Town Manager is requesting bids from qualified firms for a staffed, rental of an appropriate electronic voting system for use at its 2015 Representative Town Meeting commencing April 27, 2015.

Bids are invited and will be received by the Purchasing Officer, Town of Arlington, Massachusetts on or before **September 12, 2017, 10:30 A.M.** at the Town Manager's/Purchasing Office, Town Hall Annex 2<sup>nd</sup> floor, 730 Massachusetts Avenue, Arlington, MA 02476. Bids delivered after the appointed time and date will not be considered.

The Town reserves the right to cancel any invitation for bids, and to reject in whole or in part any and all bids, when it is deemed in the best interests of the Town to do so.

Adam W. Chapdelaine

Town Manager

August 17, 2017

## 1. Introduction

In its Annual Town Meeting in the Spring of 2013 Arlington's Representative Town Meeting approved changes in Town bylaws to permit, but not require, the use of electronic systems to record, tally, display and archive the individual votes of Town Meeting Members. (See Appendix A, voting section of Town Bylaws.) This action followed an investigation and subsequent proposals by the Town Meeting Electronic Voting Study Committee.

After a successful utilization of an electronic voting system in 2014, the Town Meeting appropriated a maximum of \$35,000 for FY2018 thru FY2020 for the purpose of renting an appropriate system for use at Annual Town Meeting 2015 that commences April 27, for as many sessions as the maximum budget will permit. Annual Town Meeting sessions are Monday and Wednesday evenings from 8 to 11 pm. and typically require 8 to 10 nights to complete the Warrant.

# 2. Key dates for RFP response, and overview of the selection process

Bid Deadline: September 12, 2017, 10:30 A.M.

Award: Within 30 days from deadline.

# 3. Scope of Services

## A. Project objective

The Town of Arlington, Massachusetts ("Town"), is seeking to rent an electronic tally and display system ("System") that uses handheld devices to provide for voting at its 252-member representative Town Meeting where each member is a potential voter. The System typically will operate in the Town Hall Auditorium at 730 Massachusetts Avenue. The Town requires onsite, vendor-supplied personnel to take primary responsibility for operation of the System during the covered Town Meeting sessions.

#### The System will:

- **Provide a visual vote confirmation to each individual authorized voter** on any item or procedure that may be presented for an electronic vote at sessions of the 2018 Arlington Town Meeting;
- Tally and display in-progress voting and voting results to all Town Meeting attendees in varying customized formats and levels of granularity, and

• Create a secure permanent electronic record of the details of all such voting (such details to be recorded at the level of every vote taken by every specifically identified Town Meeting member).

## **B.** Detailed requirements

The following subsections specify the required System components, services, and capabilities.

## Caveats regarding the detailed requirements:

- When some specified aspect of the System is seen to be desirable by the Town, but isn't deemed to be an essential requirement, the term "prefers" or "preferred" will be used below to indicate that to be the case.
- In cases where a vendor's system includes (potentially unique) capabilities that go beyond the basic requirements in a manner or manners that may be viewed as beneficial to the Town's intended System application (whether or not such capabilities are specifically indicated as "preferred"), the vendor is encouraged to include a description of those added capabilities in its response.
- If a respondent's proposed System does not support a given requirement not indicated as "preferred" (and thus is deemed essential,) the Town may nevertheless, at its sole discretion, consider accepting alternative functionality described in detail by the respondent, provided the alternative is deemed by the Town to sufficiently fulfill the objective(s) for that requirement.

## **B.1 System Components and Services**

The *System computer* (also referred to as the "operator's computer") will host the software used to develop/customize and project displays, run votes, record and maintain an archive of results, and produce reports. It will interface with the vendor-supplied radio receiver base unit(s) (see below), and with a Town-provided projection system and local cable access television via standard output connectors and VGA or BNC signaling. The System computer (as well as all other System components) should not require Internet connectivity for proper operation.

Responding vendors shall provide the specifications for the System computer. This should include hardware configuration details as well as the required operating system and any supporting commercially available application software. Vendors shall also specify whether they will provide video signal switching equipment for selecting either the voting system or the Town's hall presentation computer for display at a given time; in either case, video signal switching should be downstream of the standard VGA or BNC output.

**Radio receiver base unit(s)** to support reliable, secure, and prompt receipt, storage, and display of votes from up to 252 handsets, and the delivery of confirming responses back to each of those handsets. The respondent shall stipulate for the proposed System the maximum end-to-end time

it will take for the performance of that functional sequence for each voter (i.e., handset vote selection through handset feedback display), and also for the tabulation and display of results at the end of the Town-selected voting period.

**Battery-powered handsets** for 252 Town Meeting members, plus sufficient additional units to serve as spares. The Town prefers that handset batteries shall be non-rechargeable and of general-purpose type such as AA or AAA; however, the respondent may propose an alternative using custom or rechargeable batteries (along with supplied charging equipment). Vendors must specify the maximum number of simultaneous users (active handsets) that can be supported by their System.

**Storage containers** for all System hardware (e.g., handsets, base unit(s)). If the respondent proposes the use of rechargeable batteries, the storage containers shall also accommodate the recharging components, including wiring and charging stations.

System operation. The selected vendor will provide onsite staff to take primary responsibility for operation of the System during the covered Town Meeting sessions. Because this is a sensitive initial deployment meant to provide a robust trial of electronic voting in Town Meeting, reliability and smooth operation is especially important. The Town believes this objective can best be met by a vendor-supplied operator(s). While Town IT and other Town staff and appointed volunteers will be available to operate Town-provided systems and to handle administrative requirements (e.g., distributing and collecting handsets), it is expected that their operational knowledge of the electronic voting system will be limited; thus, the onsite vendor representative(s) will be instrumental to the successful operation of the system.

Responding vendors should describe the functions to be provided by their onsite staff in detail. Given the need to configure and verify operation of the System hardware and software components prior to each Town Meeting session, and to properly archive the session's voting data and inventory and secure equipment afterwards, it is expected that the onsite support will commence before the official start of each evening's meeting, and will continue for some time after adjournment. Vendors should provide their expectations for total time spent by their staff onsite (number of vendor staff, hours per Town Meeting session). Note that the typical duration of each Town Meeting session, from opening to adjournment is 3 hours.

#### **B.2 System Capabilities**

1. Voting shall be conducted via pre-assigned unique (at the "hardware level") handsets that will be configured to be associated with, and then distributed to, each Town Meeting member. The handset shall support the user entry of one of three voting choices (Yes/No/Abstain), and shall include a display used to confirm the user's votes. Such confirmation shall be of the user votes as actually received by the radio receiver base unit and registered in the System voting results database, i.e., confirmation must be based on feedback received by the handset from the base unit rather than simply being a local echo of user input. Vendors shall describe how this is accomplished.

- 2. The System shall allow, without limit, a voter to change his/her vote during the voting period for each matter, with only the final vote received by the System as of the close of the period being effective.
- 3. The handsets must operate reliably and securely within a 56' X 66' auditorium, without interfering with, or being interfered by, cellphone transmissions, 802.1x wireless transceivers, assisted-listening devices, wireless microphones, or other common wireless devices. Vendors should specify the maximum reliable range for the handsets, and should describe technical measures taken to protect the integrity of handset-to-base-station data communication, and to mitigate against interference from/to other wireless systems. Any potential interference interactions with other systems should be described.
- 4. The handsets shall include a low battery indicator. Battery life for the units must be at least 4 hours. Vendors should specify the expected battery life when the handsets are on and in "ready to vote" status.
- 5. If the handsets can support other non-essential System functions (e.g., requesting the attention of the Moderator), these should be specified.
- 6. It is critically important that the System will be able to provide reliable service during the covered Town Meeting sessions. Respondents should describe the measures that will be taken to ensure continued operation in the case of failure of handset, radio receiver base unit, or System computer hardware, including the expected quantities of spare unit provisioning. In the case of handset failure (or handset loss by the "owning" Town Meeting member), the vendor shall provide the detailed, step-by-step, process by which the old handset will be replaced by a properly-configured replacement unit that is then recognized by the System as being associated with the same member. The approximate elapsed time for such replacement should be specified. The System must lock out the previously recognized handset unless and until the System operator manually reactivates that handset for some future use by any voter.
- 7. All displays to be generated by the system must be legible from as far as 70 feet away when projected on a large screen with dimensions of approximately 8 feet x 8 feet.
- 8. The System shall be capable of generating a customizable display ("Slide") during voting of a 2-line (or more) description of the matter upon which the vote is being taken. Permember votes of either Yes, No, or Abstain (or Abs), both in text and identified by a unique color, or blank to indicate a non-vote, shall be displayable via multiple Slides at the conclusion of the voting period. Members shall be identifiable by name and precinct number, with a customizable number of member results included per slide.
- 9. The System shall further allow for suppression of the display of the individual member votes, such that only total Yes, No, Abstain tallies are shown, and shall be capable of displaying the required vote threshold applicable for passage of the matter to which a vote applies, and whether the matter has passed or failed based on that threshold.

- 10. The System shall permit ad hoc selection of either displaying or suppressing the display of individual member votes prior to each vote.
- 11. The System shall provide that any of the Slides (including any set of Slides to display the voting results and other matters involving display of all the Town Meeting member information) can be advanced on a customizable timed or on a manual basis.
- 12. The System shall provide for Slides that can be prepared by the operator in advance for both the specific matters expected to come before a given Town Meeting session, as well as for more generic matters (e.g., quorum calls) with the latter being able to be reused during Town Meeting but with the voting data for each use individually identified and retained. Notwithstanding this capability, the System must efficiently support voting on unanticipated matters first arising over the course of the meeting, or changes in the sequence of voting on expected items. Vendors should describe how such entirely new items or changes are supported.
- 13. The System shall provide the option of including in a Slide a customizable countdown clock that indicates the amount of time remaining during a customizable voting period. Real-time voting information (e.g., the instantaneous number of votes cast, without indicating the current Yes/No/Abstain tally) shall be displayable during the voting period. The Town prefers a provision for an indication (e.g., a change in color) during a customizable number of seconds near the end of the voting period. The Town would prefer that the voting count-down time also be included on the handset displays.
- 14. The respondent shall present suggested templates that are considered suitable for presentation of the types of Slides that have been mentioned herein on the aforementioned projection screen when viewed from the aforementioned maximum distance.
- 15. The System shall provide a secure permanent electronic record of all votes taken, within the operator's computer and available for export to an external device (e.g., a USB "thumb" drive). The record shall contain the Town Meeting members' precinct numbers, names, and their votes along with the description of each corresponding matter voted on and the date & time (to the nearest second) when the voting period for that matter ended. Vendors shall describe specifically how a session's results are stored.
- 16. Voting data shall be capable of easily being exported via standard non-proprietary formats such as Excel, PDF, Word, and CSV; vendors shall specify the formats supported by their System and shall describe options for generating reports of voting results.
- 17. The System database on the operator's computer for each Town Meeting session shall have a reversible "lock" that is set at the end of each session so that an explicit, additional, action is required to make that file editable. Correction of improperly recorded votes shall be allowed by the System, with such corrections noted in transaction/audit logs and on any generated reports.

18. In general, respondents shall describe security considerations employed within the operator's computer, as well as within the other System components, to limit the ability to modify the voting records and to preserve previous results in the case of a failure of any component of the System.

## **C. Town of Arlington Responsibilities**

- 1. Town staff will provide, maintain and operate the video display system including a projector and screen which is also utilized for speaker presentations
- 2. The Town will transmit the standard video output from the System to local cable access television and will operate the video switch between the voting system (operated by vendor-supplied personnel) and the main presentation computer (operated by town personnel).
- 3. The Town will, if necessary, provide staff or authorized volunteers to assist with the distribution and collection of voting handsets before and after each Town Meeting session.
- 4. The Town will supply electricity and a desk for the voting administrator.
- 5. The Town will format the exported voting reports for website and hard copy publication; note, however, that the ease of transforming the System's native output into a form the Town deems suitable for public distribution is a comparative evaluation factor, per section 5 below.

# 4. Submission Requirements and Instructions

- 1. A narrative with appropriate supporting appendices that addresses the requirements and questions enumerated above. Specify any equipment or functions that would be the Town's responsibility not already enumerated above.
- 2. Provide contact information for at least 3 references, with at least one from a municipal body using a comparable system and support services for comparable purposes.
- 3. Summarize your company's history, key staff, relevant experience with other municipalities, and other information pertaining to your firm's qualifications and capabilities.
- 4. Confirm your ability to provide service on the scheduled dates for Annual Town Meeting, indicating any specific dates you would be unable to provide service (Town Meeting commences April 23, 2018 and meets Mondays and Wednesday evenings for 8 to 10 total sessions).

5.	Special Town Meeting will be held late 2017 - early 2018. the vendor 60 days prior to meeting.	The Town will notify the

# Electronic Voting System Bid No. 17-46 Price Proposal Sheet

1. Furnish Electronic Voting System	as required:	
FY2018 Annual Town Meeting: \$	per meeting/session	
Option to Renew for additional 2 year funding:	ars at the sole discretion of the Town of Arlingto	n subject to
FY2019 Annual Town Meeting: \$_	per meeting/session	
FY2020 Annual Town Meeting: \$_	per meeting/session	
AUTHORIZED SIGNATURE:		
PRINT NAME:		
TITLE:		
COMPANY NAME:		
ADDRESS:		
TELEPHONE:		
CONTACT PERSON:		
DATE SIGNED:		
	ION OA, I certify under the penalties of perjury that I, e tax returns and paid all state taxes required und	
submitted in good faith and without of certification, the word "person" shall	alties of perjury that this bid or proposal has been collusion or fraud with any other person. As use mean any natural person, business, partnership, or other organization, entity, or group of individual	ed in this
Social Security Number or Federal Identification Number	Signature of Individual or Corporate N	ame
Corporate Office - (if applicable)		