



Municipality of Leamington Internet Voting Solution

Statement of Work for the Project

February 19th, 2014

ScytI - Secure Electronic Voting

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Table of Contents

1	Introduction	4
2	Statement of Work	5
2.1	Introduction.....	5
2.2	Internet Voting	5
2.3	Hosting service	6
2.4	Required Services	6
2.4.1	<i>Project management.....</i>	<i>6</i>
2.4.2	<i>Customization.....</i>	<i>6</i>
2.4.3	<i>Deployment</i>	<i>7</i>
2.4.4	<i>Testing.....</i>	<i>7</i>
2.4.5	<i>Training</i>	<i>8</i>
2.4.6	<i>Support.....</i>	<i>8</i>
2.4.7	<i>System operation.....</i>	<i>9</i>
2.5	Municipality of Leamington Responsibilities	9
2.6	Project Plan & Deliverables	10
2.6.1	<i>Project Plan Diagram.....</i>	<i>10</i>
2.6.2	<i>Phase 1: Project Initiation</i>	<i>10</i>
2.6.3	<i>Phase 2: System Preparation</i>	<i>11</i>
2.6.4	<i>Phase 3: Deployment</i>	<i>12</i>
2.6.5	<i>Phase 4: User Acceptance</i>	<i>13</i>
2.6.6	<i>Phase 5: Training.....</i>	<i>14</i>
2.6.7	<i>Phase 6: Final Preparations.....</i>	<i>15</i>
2.6.8	<i>Phase 7: Go Live and Support.....</i>	<i>15</i>
3	Financial Proposal	16

1 Introduction

The Municipality of Leamington wants to conduct the municipal election of 2014 using ScytI's Internet voting solution. This document describes the services that ScytI is offering to execute during the Project. It will also describe the fees associated with the project.

2 Statement of Work

2.1 Introduction

This Section includes a detailed description of all the products and services provided by ScytI to execute the Project:

- The Internet Voting system
- Creation and mail out (postal) of Credentials will be provided by ScytI. (Note: Voter ID and Barcode information will originate from DataFix. ScytI will execute the PIN Creation).
- The services and associated hardware and software for hosting the Pnyx Internet voting system platform in Canada.
- The professional services to be provided by ScytI in connection with the Project.

This Section also contains a description of the tasks that the Municipality of Leamington shall assume in the Project.

2.2 Internet Voting

- (a) ScytI will provide its Pnyx Internet voting system to allow the Municipality of Leamington to use the Internet voting channel with their voters in the 2014 Municipal Election:
 - (i) The component will generate the voter digital certificates.
 - (ii) The component will be able to fully integrate with DataFix.
 - (iii) The component will provide the Internet voting results at the end of the election.
- (b) Pnyx will be implemented with the following characteristics
 - (i) Will support the configuration of the Municipal election ballot types
 - (ii) Will support under votes (including a warning for the voter)
 - (iii) Will support two languages (English and French)
 - (iv) Will allow voters to access the voting system using the voters' devices with internet access.
 - (v) Will be customized in the following areas: displayed texts and the page banner, until the code freeze date previously agreed for the Project. After the solution goes live, no changes will be allowed on the solution.
 - (vi) Will provide the election results in the back office interface, via a web service and in files with CSV format.

2.3 Hosting service

Scytl is including in its offer the required services, hardware and Commercial Off-The-Shelf (COTS) software to host the solutions described above in its Canadian data centre.

Specifically, Scytl will provide:

- (a) A reliable hosting service in a data centre located in Toronto, ON, with multiple ISP providers, power redundancy and fire prevention mechanisms.
- (b) A high availability architecture based on redundant servers and an Oracle data base cluster
- (c) Linux-based servers running Apache as web server and Tomcat as application server
- (d) Best practices in IT security, including an IDS/firewall system and server hardening techniques.

2.4 Required Services

2.4.1 Project management

Scytl will provide Project Management services during the Project election:

- (a) Scytl will appoint a Project Manager at the beginning of the project, acting as single point of contact for the Municipality of Leamington. A secondary point of contact will be defined too.
- (b) Scytl's Project Manager will be in charge of managing all the functional and non-functional aspects of the project which are the responsibility of Scytl.
- (c) Scytl's Project Manager will assist in the production of an initial project schedule, a project management plan and the agenda for discussing detailed specifications.
- (d) Scytl's Project Manager will also agree with Municipality of Leamington the communication and coordination mechanisms.
- (e) Scytl's Project Manager will assist the Municipality of Leamington with the overall implementation of the Project.

2.4.2 Customization

The products provided by Scytl usually require a limited amount of configuration so they fulfil customer requirements. For the Municipality of Leamington, Scytl has foreseen the configuration needs listed below for each proposed solution.

- (a) Scytl will customize the Online Registration system as described below:
 - (i) The graphical design. The areas that can be configured are: displayed texts and page banners.

- (ii) The texts and messages of the different screens, emails, etc.
- (b) Scytl will configure the voting system in the aspects described below:
- (i) The graphical design. The areas that can be configured are: displayed texts and page banners.
 - (ii) The electoral models. Scytl will include in the voting platform the electoral models legally recognized by the Municipality of Leamington for the Municipal elections, the way voters vote (e.g. select X options out of Y), the voting sequence and the tallying process.
 - (iii) Voter credentials. Scytl will provide the following type of voter credentials to the voters:
 - One PIN of 8 alphanumeric obtained from the system
 - PIN will be displayed in 2 boxes containing 4 alphanumeric fields
 - Entry to the voting system will require:
 - ✓ Voter Id
 - ✓ PIN
 - ✓ Birthdate
 - (iv) Statement of Eligibility. Scytl will include the legal text to be provided by the Municipality of Leamington.
- (c) Configuration activities will proceed until the code freeze date previously agreed. After the solution goes live, no further changes will be accepted.

2.4.3 Deployment

- (a) Scytl will deploy the Pnyx Internet Voting system in its Data centre in Canada
- (b) Scytl will perform a hardening process on all the servers to leave active only the required services, users and remote connections.
- (c) Scytl will also perform a logical sealing on the servers.

2.4.4 Testing

Scytl will provide different services to perform the testing of the Voting System before the election:

- (a) Scytl will perform initial tests to check:
 - (i) System reliability
 - (ii) System performance
 - (iii) System operation
- (b) Municipality of Leamington will define the test cases for UAT (User Acceptance Testing) and send them to Scytl 10 working days before UAT in order to evaluate them and perform pre-UAT testing. Scytl will support the Municipality of Leamington in these tasks.

- (c) ScytI will assist the Municipality of Leamington in the execution of the system tests (UAT). If defects are detected ScytI will resolve the defects and provide any updates required for the Municipality of Leamington to conduct further tests.
- (d) ScytI will assist the Municipality of Leamington and its selected auditor in the security auditing processes that may be applied to the installed platforms. The support included in this offer is limited to providing information about the product and its security measures to the auditor, and in reviewing the report(s) generated by such task.

2.4.5 Training

ScytI will provide the following training:

- (a) Direct training of Municipality of Leamington's staff responsible for operating the on-line registration system:
 - (i) How the system works
 - (ii) Interchanging data with the voting system
 - (iii) Verification of updated data
 - (iv) Managing voter requests and the registration process
 - (v) Auditing procedures
- (b) ScytI will also provide some materials (such as FAQs) for the Municipality of Leamington to train their support staff.
- (c) All the documentation will be provided in English.
- (d) All the training sessions will be in English

2.4.6 Support

ScytI will provide technical support to the Municipality of Leamington during the Project:

- (a) In the periods of time where there is no voting activities: remote support (email/telephone) to Municipality of Leamington's staff to solve any issue/doubt regarding using the deployed systems during ScytI's office hours.
- (b) In the periods of time where there is voting activities, remote support to Municipality of Leamington's staff to solve any issue/doubt regarding using the deployed systems during Municipality of Leamington's Election business hours.
- (c) Support for Municipality of Leamington's call centre staff attending voters (by email):
 - (i) Tier I Support (Customer): Support related to questions included in the FAQ provided to the Municipality of Leamington is to be provided by Customer's local help desk.
 - (ii) Tier II Support (ScytI): Support related to questions not covered by Tier I Support as well as systems issues including those that may need to be escalated to Tier III Support.
 - (iii) Tier III Support (ScytI): Tier III Support shall cover any incident that involves a critical failure of the registration or voting platform as a result of a defect that

renders the registration or voting solution unable to perform the necessary business functions.

- (d) Other support schemes are available and can be discussed with the Municipality of Leamington.

2.4.7 System operation

ScytI will operate certain systems on behalf of the Municipality of Leamington during the Project:

- (a) Supervision of the Pnyx Internet Voting system
- (b) Operation of the Pnyx Internet voting system in terms of configuring the election and supervising its performance
- (c) Operation of the system for creating voter digital certificates and printable credentials
- (d) Destruction of sensitive data after election is closed.

2.5 Municipality of Leamington Responsibilities

Certain tasks must be performed by the Municipality of Leamington to guarantee the success of the Project.

- (a) Appoint a Project Manager to be the single point of contact for ScytI. He/she will act in coordination with ScytI's Project Manager.
- (b) Actively participate in the detailed specification of the system and during its acceptance
- (c) Provide:
 - (i) The revision for the texts that appear on the interfaces of the selected solutions that will be implemented.
 - (ii) Review all the information once included in the implemented solutions.
- (d) Validate the customized and installed solutions.
- (e) Provide all the different hardware and software elements that may be required during an electoral process and not included in the list of components provided by ScytI.
- (f) Provide an auditing entity if the Municipality of Leamington desires to execute a detailed analysis on the solution.
- (g) Operate the Pnyx Internet Voting system back office to create the Electoral Board and to perform the mixing process in order to obtain the internet voting results.
- (h) Participate in the training sessions
- (i) Municipality of Leamington will provide a domain (www.learmington.votes.ca) and associated digital certificate for the voting site.
- (j) Provide the required information about the project in the selected websites, including its set up and management.

- (k) And in general, any task required for the execution of the project not specifically assigned to ScytI.

2.6 Project Plan & Deliverables

The project has been planned in different phases; the following sections describe the planning, objectives and deliverables to be managed by each party in each one of the phases.

2.6.1 Project Plan Diagram

The following project plan shows the overall planning divided in each one of the phases needed for the development of the project. The initial date to start the definition phase has been set to end of February 2014 and the project will be completed on the 27th of October 2014.

The availability of resources needed for each one of the actions are outlined in the project plan below and described in the following sections.

1. Project Initiation	February - March
2. System Preparation	March - April
3. Deployment	April - May
4. User Acceptance	August
5. Training	August
6. Final Preparations	September - October
7. Go Live and Support	October 17 th – 27 th

2.6.2 Phase 1: Project Initiation

In this phase the characteristics of the platform must be agreed, such as the definition of the exact system requirements (workflows and screens), setting the validation strategy (testing) and the project management methodology. The result of this phase will be the project management plan; the initial requirements document (workflow) system and the scenarios to be used to validate the system.

Objectives
<ul style="list-style-type: none"> • Establish an initial work agenda (Project Plan) • Review the Project Management methodology • Define the specific requirements of the election workflow • Creation of the validation scenarios based on the defined workflows

Required Input	
<ul style="list-style-type: none"> Signed Contract with the Municipality of Leamington Initial system requirements (workflows) of the election process Statement of Work (this document) 	
Tasks/Actions	
ScytI	<ul style="list-style-type: none"> Complete the final Project Plan definition Creation of a document with the specific requirements (including electoral model, workflows, required data, screens, csv format...) Definition of the validation scenarios
Municipality of Leamington	<ul style="list-style-type: none"> Appoint a Project Manager to be the single point of contact for ScytI Active participation on the meetings for the requirements gathering Review and approval of the generated documentation (optional) Select and purchase a web domain
Deliverables	
<ul style="list-style-type: none"> Agreed Project Plan document Agreed Requirements document for the solution to be implemented Agreed scenarios document for the production system validation 	

2.6.3 Phase 2: System Preparation

Once the system specifications and design have been agreed with the Municipality of Leamington, ScytI will proceed with the system set-up. The result of this phase will be the Pnyx system customized to the specific requirements of the Municipality of Leamington elections. Specifics of this phase can be found on section [2.4.2 Customization](#)

Objectives
<ul style="list-style-type: none"> Configuration of Pnyx platform to the requirements specified by Municipality of Leamington
Required Input
<ul style="list-style-type: none"> Requirements document for the solution to be implemented Final texts, colors and images that will appear on the interfaces of the selected solutions

Tasks/Actions	
ScytI	<ul style="list-style-type: none"> Configure Pnyx platform according to the requirements document
Municipality of Leamington	<ul style="list-style-type: none"> Provide the final texts, colors and images (in .jpg) that will appear on the interfaces of the selected solutions (aligned with what has been defined on the requirements document) Availability of the Project manager in case that there is any doubt on the solution requirements
Deliverables	
<ul style="list-style-type: none"> Configure Pnyx platform according to the Municipality of Leamington needs 	

2.6.4 Phase 3: Deployment

During this phase, the customized solutions will be deployed on ScytI's Canadian based data centre and it will be validated against the requirement documents.

Objectives
<ul style="list-style-type: none"> Installation of the customized Internet Voting system on ScytI's Canadian data center Validation of the installed solution by ScytI and bug fixing (if required) Configuration of the electoral data for the Municipality of Leamington elections Creation of the "Electoral Board Kit"
Required Input
<ul style="list-style-type: none"> Customized Pnyx solution software data Available hosting servers on ScytI's Canadian data centre Scenarios document for the system validation

Tasks/Actions	
ScytI	<ul style="list-style-type: none"> • Hardware and COTS Software configuration to host the customized solutions on ScytI's Canadian Data Centre • Installation of the customized solutions on the server • Application of security elements to the servers (hardening and logical sealing) • Validation that the installed solution is working • Configuration of the electoral data for the Municipality of Leamington elections • Validation of the solution in terms of reliability and performance • Validation of the solution against the agreed validation scenarios • Creation of the "Electoral Board Kit"
Municipality of Leamington	<ul style="list-style-type: none"> • Availability of the Project manager in case that there is any doubt on the validation process
Deliverables	
<ul style="list-style-type: none"> • Functional online system according to requirements ready to be acceptance testing. • The "Electoral Board Kit" that will be used by the Municipality of Leamington 	

2.6.5 Phase 4: User Acceptance

Once the hardware and the software have been installed, secured and verified by internally ScytI, it will be the time for the Municipality of Leamington to verify its correct functionality according to the validation scenarios agreed on the Project Initialization phase. Specifics of this phase can be found on section [2.4.4 Testing](#).

This phase will run in parallel with "Phase 5: Training", since it is necessary to understand the system to be able to carry out the user acceptance test.

Objectives
<ul style="list-style-type: none"> • Verify that that the production system complies with requirements • Ensure that all data and functionalities are correct

Required Input	
<ul style="list-style-type: none"> • Pnyx Internet Voting solution installed on Scytl's Canadian Data Centre and configured with the election data • The "Electoral Board Kit" • Scenarios document for the system acceptance tests 	
Tasks/Actions	
Scytl	<ul style="list-style-type: none"> • Support during the user acceptance tests • Adjustment of the system in case corrections have to be made • (optional) Scytl will provide information about the product and its security measures to an auditor selected by the Municipality of Leamington
Municipality of Leamington	<ul style="list-style-type: none"> • Perform the required tests (complete workflows) to validate the correct implementation of the production system • Sign-off the solution's approval • (optional) Security audit of the solution
Deliverables	
<ul style="list-style-type: none"> • Sign-off document by the Municipality of Leamington confirming the acceptance of the system 	

2.6.6 Phase 5: Training

As defined in any project methodology it will be necessary to prepare and execute a training plan for the system administrators and the support staff of the Municipality of Leamington.

Objectives
<ul style="list-style-type: none"> • Train the Municipality of Leamington's staff responsible for operating the internet voting system, as well as the support staff that will be available during the election
Required Input
<ul style="list-style-type: none"> • Pnyx Internet Voting solution installed on Scytl's Canadian Data Centre and configured with the election data

Tasks/Actions	
Scytl	<ul style="list-style-type: none"> • Direct training of Municipality of Leamington’s staff responsible for operating the internet voting system • Scytl will provide up to two remote training sessions to Municipality of Leamington staff • Scytl will provide the training environment for the Electoral Board operations
Municipality of Leamington	<ul style="list-style-type: none"> • Participate in the training sessions • Validate the knowledge transfer • Train the support staff that will be available during the election days
Deliverables	
<ul style="list-style-type: none"> • Training Documentation (Manuals in English) 	

2.6.7 Phase 6: Final Preparations

Candidate names will be submitted and Scytl will finalize the ballots by September 14th. Scytl will mail the voting instructions and credentials on October 9th.

2.6.8 Phase 7: Go Live and Support

Once the system has been accepted by the Municipality of Leamington and the technical and support personnel have been trained, the Project Election can be launched. Specifics of this phase can be found on section [2.4.6 Support](#).

Objectives
<ul style="list-style-type: none"> • Run the Municipality of Leamington Project elections with electronic registration and voting
Required Input
<ul style="list-style-type: none"> • Accepted Pnyx and Online Registration solutions installed on Scytl’s Canadian Data Centre and configured with the election data • The “Electoral Board Kit” • Municipality of Leamington’s Trained personnel

Tasks/Actions	
ScytI	<ul style="list-style-type: none"> • Tier II and Tier III remote support (email/telephone) to Municipality of Leamington's staff to solve any issue/doubt regarding using the deployed systems during Municipality of Leamington's Election business hours • Operate the Pnyx voting system to create the Electoral Board and to perform the mixing process in order to obtain the internet voting results • Supervision of the Pnyx Internet Voting system • Destruction of sensitive data after election is closed
Municipality of Leamington	<ul style="list-style-type: none"> • Communication of the Municipality of Leamington's Internet Voting elections to the voters • Operate the Online Registration system • Tier I Support, support to questions included in the FAQ provided to the Municipality of Leamington is to be provided by the local help desk • Consolidation of internet voting results
Deliverables	
<ul style="list-style-type: none"> • Delivery of internet voting results to Municipality of Leamington in .CSV format • Publication of the final consolidated results of internet votes 	

3 Financial Proposal

The total Contract Fee for the Municipal election in 2014 provided in this proposal is outlined below and is expressed in Canadian Dollars:

- \$.90 per voter for a total of 16, 826 voters (voters to be determined upon final voter's list from DataFix)
- \$.97 per voter for the creation and mail out (postal) of a Voter Notification Letter to Electors (Note: this amount is based upon Canada Post charging \$.70 cents per letter. Actual price may vary in the same amount as the actual cost per letter charged by Canada Post.)

Pricing does not include taxes, duties, or fees and are the responsibility of the Customer.

Payment Plan:

- 25% upon Signature of the contract
- 25% upon Access of the system
- 25% upon UAT completion
- 25% October 31, 2014 (after the election)

End of SoW