

**PART E**  
**SPECIFICATIONS**

## **PART E - SPECIFICATIONS**

### **GENERAL**

#### **E1. GENERAL**

E1.1 These Specifications shall apply to the Work.

#### **E2. SOFTWARE**

E2.1 For the following specifications, in addition to providing information on currently available functions, the Offerer is requested to include planned future functionality and availability dates if and where applicable.

#### **E3. SERVICE REQUIREMENTS**

E3.1 This project will equip the Community Development and Recreation Services Division with the tools (technology) and means (workflows and work processes) to implement a comprehensive Recreation Program and Facilities Booking System that meets the following general requirements:

- (a) Bilingual Services
  - (i) The system shall support English and French language services from registration service locations, online through a secure Internet website, or by using telephone IVR Technology.
- (b) Adoption of Best Practices (Re-engineering)
  - (i) The City will look to the system vendor for guidance and a strategy to implement industry best practices throughout the project implementation.
- (c) A One-Stop Service Model
  - (i) The system shall allow registration or facility booking access for any recreation program in person at registration service locations (see list in section D.4), online through a secure Internet website, or by using telephone IVR Technology.
- (d) Service Availability
  - (i) Service outages at the Community Services Department Central Office, the Wide Area Network, or the City's Internet access facilities must not prevent Recreation Service sites from carrying out registration and bookings activities specifically related to those sites. This is referenced further under technology deliverables.
- (e) Program Administration
  - (i) The system shall provide a range of administrative tools and interfaces to allow the system to respond easily to the following requirements. "Easy response" means these functions can be carried out by a non-technical administrative user given a reasonable amount of training.
- (f) Rates and Fees Bylaw Integration
  - (i) The system must allow easy implementation of changes to Rates and Fees as established and revised from time to time by the City of Winnipeg's Rates and Fees Bylaw.
- (g) Membership administration
  - (i) The system must provide membership services based on family and other affiliation and must be able to apply membership specific rates and fees.
- (h) Client Accounts

- (i) The system must be able to create customer accounts capable of handling memberships, program registrations, credit notes and account subsidies facility and amenity bookings and rental agreements.
- (i) Price Adjustment Options
  - (i) The system must provide tools and interfaces to allow rapid implementation of changes to pricing models. The system should allow variable pricing options. Variable pricing may be accommodated through membership administration tools.
- (j) Customer Service Features
  - (i) The system must provide tools and interfaces to allow rapid response to customer inquiries. These inquiries may come in person, by Internet and by telephone.
  - (ii) The RBS must be able to process refunds, in whole or in part, in the form of cash returns, debit card credits, Visa/MasterCard credits, credit notes and other methods as appropriate. Refund requests must be able to be processed from any full service RBS site.
- (k) Customer Service Performance
  - (i) The system should be able to process Visa and Mastercard authorizations and Debit Card transactions in peak periods with no more than a 5 second turn around time.

#### **E4. TECHNOLOGY REQUIREMENTS**

E4.1 This project will gain advantage by pursuing: opportunities for “Common Cause” leverage through other City of Winnipeg Corporate Technology Initiatives. New technology components will be developed where they are required to achieve broader objectives that otherwise would not be met, where they complement the City’s technology strategy. While the main focus of this project is on Recreation transactions, the system architecture will be developed with a view of service expansion where possible. Areas to be considered will include (but are not limited to) the following:

- (a) Single Sign-On
  - (i) While the focus of this project is Registrations and Bookings the system should provide proof of concept for the broader use of Single Sign-On technologies; initially for the City of Winnipeg Community Services Department.
- (b) Point of Sale Systems
  - (i) The project should include Point of Sale/Cash Drawer integration with the Registration and Booking System (RBS) at “in person” customer service points. POS Solutions should accommodate provide Visa, Mastercard, Debit Card transactions.
- (c) Online eCommerce Services
  - (i) The project must include online payment options. The RBS vendor will be expected to implement an online payment solution satisfactory to the City of Winnipeg’s bank that provides Visa, Mastercard, Internet, IVR based and online Debit Card transaction services.
- (d) Internet & IVR Access
  - (i) The project shall provide Internet and IVR based access for the full range of RBS services; the same as would be available at any “in person” customer service point. Internet and IVR are expected to be available on a 24x7 basis, subject to the City of Winnipeg’s support capacity.
- (e) Internet Mail List Services
  - (i) The Internet portion of the RBS should provide Email List Services to members of the public wishing to sign up for periodic email delivery of program information.

- (f) Content Management Interfaces
  - (i) The recreation service catalogue, known as the Leisure Guide, will be expanded to include all service offerings and made available through the Internet.
  - (ii) The Content Management Interface must interact with the online service catalogue (Leisure Guide) and RBS Web Pages to ensure that up to date service offerings are reflected.
  - (iii) The RBS should provide a high degree of automation, which does not require extensive administrative user intervention, to update Web Pages and the Online Leisure Guides. Current program delivery information shall be reflected in all online media.
- (g) Interaction with PeopleSoft – Connexus
  - (i) Recreation transactions are currently exported from an in-house ledger system through an Excel spreadsheet for upload to PeopleSoft.
  - (ii) Accounts Receivable processing is done through the Great Plains Accounts Receivable Module which then exports a file for upload to PeopleSoft.
  - (iii) The RBS must have at least this level of functionality and should have the ability to integrate directly with PeopleSoft as implemented at the City of Winnipeg.
  - (iv) The ability to directly manage Accounts Receivable sufficiently to replace Great Plains would be a distinct asset.
- (h) Distributed Architectures and Communications Architectures
  - (i) Support for offline processing, synchronization and database replication or other suitable failover options during periods of WAN and Server outages must be implemented for all local installations to guarantee access to onsite services. The RBS will be distributed to a minimum of 22 geographically disbursed service delivery sites, and one central office. In addition, Point of Sale services may be required at additional sites to process fee for service cash transactions, like public swim.
  - (ii) The allocation of RBS Technology to individual sites will be derived from a detail analysis of requirements conducted in consultation with the successful bidder to the RFP.

## **E5. INFORMATION MANAGEMENT REQUIREMENTS**

- E5.1 Advances in information technology have created an expectation of immediate, accurate and accessible information by the public. There is a growing demand for data that can be linked with other Community related Information to aid in evaluation and decision support. This project will provide tools and interfaces that access recreation program data repositories to extract information that will support program delivery decisions.
- E5.2 The project acknowledges that development and application of knowledge, through the assembly and analysis of diverse information resources is the key to providing relevant community-based services.
- E5.3 Service Delivery
  - (a) The system must provide tools and interfaces to allow the creation, modification and deletion of service components when ever the Community Services department desires to do so.
  - (b) Analytical Products – Program Analysis and Evaluation
    - (i) The system must provide report generation capabilities for analysis of; uptake, trends, impacts etc. The ability to query the database with standard SQL tools and/or report generators like Crystal Reports is a requirement. Export of query results to Microsoft Excel and/or Microsoft Access is also required. Export through the use of delimited flat files is an acceptable alternative.

- (c) External Data Relationships
  - (i) The Database Schema, including the Data Dictionary, should be available for the purpose of building reports and/or external applications that correlate RBS information with external data sources. The underlying principle for this requirement is the level of Recreation Program inter-connectedness with other community-based services.
  - (ii) Data repositories, such as those linked together under the Community Resource Area Model would include correlations of Demographics, Neighbourhood Targets and Community Development Objectives, all of which are seen as a part of an enhanced program evaluation capacity.
  - (iii) The linkages described are for analytical purposes, it is not intended to build custom applications on top of the RBS during the implementation of in this project.
- (d) Budget and Financial Tools
  - (i) The RBS should have the ability to assign cost and revenue attributes to all program components to allow for effective financial management of program delivery. Cost and revenue data must be exportable in a format compatible with Microsoft Excel 2003.
- (e) Performance Metrics and Work Methods analysis
  - (i) The RBS should contribute metrics and provide monitoring tools to help ensure that Best Practice Implementations remain dynamic and relevant to the Community Services Department's business model.
- (f) Legislated Privacy Requirements.
  - (i) All client information stored within or managed by the RBS must conform to all Federally and Provincially legislated privacy requirements that apply to the City of Winnipeg. This includes requirements under FIPPA, PIPEDA, PHIA and the City of Winnipeg Act.
- (g) Marketing – Development of a Marketing Body of Knowledge
  - (i) While the RBS project will not create a Marketing Body of Knowledge during its implementation phases, it is expected that the analytical/query tools and interfaces provided will allow for the collection of information to support marketing analysis. Specifically this type of information must be exportable to MS Excel and or MS Access. The Community Services Department is a user of SPSS and the ability to export information in a compatible format is desirable. Export through the use of delimited flat files, where direct export is not possible, is acceptable.

## **E6. DEPLOYMENT**

### **E6.1 Timeline**

- (a) It is estimated that this project will be fully delivered over a 12 month period ending in December 2005. RFP Issue is expected for October 30<sup>th</sup>, 2004 with award and contract negotiations to be completed by December 30<sup>th</sup> 2004.

### **E6.2 Priority**

- (a) The deployment plan will be coordinated in consultation with the successful bidder to the RFP. Implementation will start with the Central Bookings Office and then move to full-time Aquatic sites. The roll out schedule beyond these 1<sup>st</sup> two stages will be determined subsequently.
- (b) To be clear on priorities, "Full Registration Services" includes onsite services, Internet eCommerce and IVR transaction services supporting Visa, Mastercard, debit Card, cheque and cash transactions.

- (c) Analysis of Registration, Booking and membership processes currently in use, and recommendation of best practices appropriate to each function, including the development of a migration to best practices strategy in consultation with the City of Winnipeg RBS Project Team.
- (d) Central Office – 395 Main  
The role of the Central Office will be expanded to provide full registration services for all recreation programs. Staff at this location will interact regularly with analytical tools and system administration interfaces.
- (e) Internet Services  
Deployment to the Internet will be part of the Central Office implementation.
- (f) IVR Services  
Implementation of IVR access will be part of the Central Office implementation.
- (g) Full Service Delivery Sites  
Full Service sites offer both recreation program delivery and full registration and bookings access. These are generally year round operations.
  - (i) Indoor Aquatic Facilities (12)
  - (ii) Recreation & Leisure Centres (4)
  - (iii) Outdoor Aquatic Facilities (3) seasonal
- (h) Community Offices (3) – registration only sites.
- (i) Partial Service Sites (6)  
These locations may be required to process onsite program registrations. These sites are seasonal outdoor Aquatic Facilities offering public swim only. Deployment to these sites will be reviewed with the successful vendor before a go ahead decision is made.

## **E7. FUNCTIONALITY**

### **E7.1 Integration**

- (a) Confirm that the application will provide the capability to import and export data from and to the standard Microsoft Office suite of desktop products (e.g. Excel, Word, PowerPoint, Outlook etc.). Comment briefly.
- (b) Confirm that overall integration and interfacing capabilities of the application software have been successful (the software application should be able to interface with an E.R.P. system such as PeopleSoft). Comment briefly with past examples.

### **E7.2 Reporting and Analysis**

- (a) Confirm that the application software has the capability to provide online, ad-hoc query, standard, and tailored reporting and analysis; and is considered easy to use and accurate. Comment briefly.

### **E7.3 Security**

- (a) Confirm that the application software has the capability to define security profiles for system users, such as transaction and screen field levels. Describe briefly.

### **E7.4 Data Entry**

- (a) Confirm that the application software is able to perform online real-time data entry; editing and error correction to ensure that all data entered is accurate (ensures correctness of

data entered); Complete (ensures all necessary data is entered); Non-redundant (ensures that duplicate data is not entered). Comment as required.

**E7.5 System Integrity**

- (a) Confirm that the application software has the capability and capacity to archive, purge and retrieve application data based on line user criteria. Describe briefly.
- (b) Confirm that the application software has the capability to create audit trails; which allows for tracking of all types of transactions by system user id, date and time information, transaction type, before and after field values etc.

**E7.6 Workflow**

- (a) Describe how the application software supports and enables electronic workflow incorporating System User business rules and procedures.

**E7.7 E-Commerce**

- (a) Confirm that the communication capabilities in the application software allows for the electronic exchange of information between internal City staff, and with external parties such as vendors, agencies and citizens. Provide examples from past implementations, such as Electronic Authorization and Authentication (EAA), Electronic Data Exchange (EDI), Electronic Funds Transfer (EFT), Interactive Voice Response (IVR), E-Mail, Fax.

**E8. TECHNOLOGY SPECIFICATIONS**

**E8.1 Recommended Equipment**

- (a) When recommending appropriate hardware and system software requirements for E8.3 and E8.4 please complete Form O Recommended Equipment table.
- (b) Detailed Description and Configuration
  - (i) Requires the Bidder to itemize your response for the particular equipment (hardware or software) being recommended and all specifics of that recommendation (including but not limited to manufacturer, model/version, patch level, CPU speed, memory, network interface, storage interface, storage configuration, cost (portion of bid amount), etc).
- (c) Quantity
  - (i) Requires the Bidder to itemize your response for the particular equipment (hardware or software) being recommended and the quantities of each piece of equipment being recommended. The quantities specified should clearly indicate if the recommended equipment is mandatory or optional and if it has been included in the bid amount. The City current owns a wide range of Information Technology assets so the Offerer should provide options for the acquisition of the recommended equipment.
- (d) Offerer Resource Effort
  - (i) Requires the Bidder to itemize your response for your staff by: level (i.e. Partner, functional consultant, technical consultant, functional analyst, technical analyst etc), the number of person day's effort for each level, % of on site versus off –site by level and % employed by the Contractor and Subcontractor(s).
- (e) City Resource Effort
  - (i) Requires the Bidder to itemize your response for City staff by: the type required (functional/business or technical), the level required (Senior Staff, Working Level Staff) and the number of “ person days” of effort for each level and type.

**E8.2 Application Technical Environment**

To assess the degree to which the proposed application system fits the City's existing and future application development and support environment.

(a) Application Environment

- (i) Examines the degree to which the split of business processing between clients and servers promotes scalability, configurability and manageability. The logical and physical architecture of the application is assessed to determine the degree to which performance and availability can be managed. In addition, this item measures the relative position of the application design with respect to its use of current technology (in terms of having excellent prospects of longevity and software vendor support within its product life cycle) balanced with the need to be suitably proven in other production installations similar to the City (in terms of providing a stable, highly available environment which meets our performance expectations). We need to ensure that the application will be viable for many years into the future, but do not wish to take undue risks with respect to being too close to the leading edge of technology.
- (ii) Describe the logical and physical tiers of the application environment with regards to the split between presentation, application and data.
- (iii) Describe the process and skill sets involved in performing application configuration changes, including online configuration changes if applicable.
- (iv) Describe the process for maintaining City-developed custom coded solutions, such as the provision of an interface to/from another application system or the generation of a unique management report, between application software releases.
- (v) Describe the approximate number of FTE's (full time equivalent staff) and/or a percentage of the original implementation team FTE's required to upgrade to a new version/release.
- (vi) Describe when Microsoft Internet Explorer 5, Internet Explorer 6 and plans for future releases of Internet Explorer were or will be supported by and certified use with the application system.
- (vii) Describe supported methods for printing high and low volume centralized and decentralized printed output requirements.
- (viii) Describe any native/optional output management tools, including scanning, storing, viewing and printing documents / reports
- (ix) Describe the application transaction logging capabilities.

(b) Developmental Tools

- (i) Examines how the proposed development tools facilitate the continued translation of business requirements to production applications. Support staff will need to be involved in detail with the development tools in order that the system can be integrated with other City systems, and continue to be enhanced as future requirements are met. The question of proprietary versus commercialized tools will be assessed in addition to the tool's strength and software vendor commitment.
- (ii) Describe the proposed City application support environment, including your recommended web-based and client/server development tools for simple and complex development, including test and debugging tools, benchmark/stress tools, quality assurance, source code/configuration file management and process modeling tools.
- (iii) Describe all supported web-based and client/server report writer and query mechanisms, including your recommended approach, that enable modification of existing report formats and content, plus the creation of new reports.
- (iv) Describe the recommended tool and methodology training requirements.

(c) Data Models



- (i) Application data model requirements discover if there is a working blueprint to allow extension and integration of applications across business functions. At some level, any business application will co-exist with multiple business areas and other applications. This also includes a qualitative evaluation of the proposed system's data model with regard to robustness, data normalization and breadth. This measurement is a good indication of the ability of an application to handle additional requirements to maintain data, and the availability of this data for subsequent reporting. In addition, compliance with industry standards for interoperability can be objectively measured.
  - (ii) Provide the application data model including entity relationship diagrams and the logical data model
  - (iii) Identify whether the physical data model and data dictionary are available to the City's developers.
- (d) Technical Integration
- (i) This assesses the extent to which application functions are integrated at the technical level including the integration between core functions and add-ons, third party and custom solutions. This will include assessment of the support issues associated with core versus hybrid application integration. We will assess the ability to and the technical manner in which the solution can accept and send data and/or triggers for sharing information between solution and other City systems in real time, cyclical time, time oriented or batch modes. Offerers are expected to be fully responsible for the definition of "standard" interfaces with applications outside of the proposed system. Offerers will be fully responsible for developing the interfaces and integration on the RMIS side, while City departments will handle their half of the interface/integration. The Offerer is fully responsible for all integration and interfaces within the RMIS solution ( e.g. The City's Financial systems).
  - (ii) Describe your application program interface and/or other standard application facility for the sharing of data and function to and from other application systems.
  - (iii) Describe the skills and experience required by City staff to design and develop integration and interfaces between the proposed application and existing systems, based on the bi-directional flow of data in online, time sequenced or batch modes.
  - (iv) Describe the application interface to Email (Microsoft Exchange) for issues such as report distribution or general notification

### E8.3 Infrastructure Technical Environment

- (a) To assess the degree to which the technology of the proposed application fits the City's technical environment. Environment requirements typically include the client, server and network. Server requirements focus on hardware and operating systems compatibility. The choice of a database management system is included in the server requirements. Network requirements should focus on compatibility with particular emphasis on network protocols and bandwidth requirements for local and remote users. Client requirements should focus on desktop hardware, operating systems and graphical environments. Client requirements assess whether implementation of a single product can cover multiple desktop environments. Both qualitative and objective metrics are used to establish performance ratings.
- (b) Servers (Production, Test, Development, Others)
  - (i) The City prefers HP/Intel Windows 2003 Server platforms based on existing staff skill sets, and will consider others based on their overall merits with regards to their capability to best meet the City's needs as recommended by the Offerer. The system will eventually be used by as many as 150 named users, with as many as 50 Logged on users and as many as 50 concurrent (active) users processing transaction volumes of 4000 (includes general admissions) on an average day with substantially higher volumes in peak periods.

- (ii) In addition to configuring the servers to meet application user demands, please consider the impact on the server workload and storage space of the installation of your recommended systems management software in Specification E8.4
  - (iii) Recommend appropriate server hardware configurations including operating system software to satisfy the City production, test, development and other appropriate (such as training and/or research) processing demands, providing reliability, availability and performance commensurate with a mission critical application.
  - (iv) The Offerer should agree to remedy any of the specified hardware or systems software configurations at the Offerer's cost, if sub-second response time is not achieved for typical online transactions and availability requirements in excess of 99.0% for prime time scheduled availability are not met during the acceptance test period.
  - (v) Describe the methodology used to configure the recommended server configurations and what methodology the City should use to perform future capacity planning as the growth of the application systems evolves.
  - (vi) Describe warranty terms and maintenance provisions and services related to the recommended server hardware and software configurations. Please include all license, maintenance, warranty and support agreements.
  - (vii) Provide a list of appropriate technical courses related to the proposed hardware and operating system configurations including formal courses, online tutorials, computer based training, prices and locations
  - (viii) Describe online help/documentation and hardcopy documentation for the proposed hardware and system software configurations to be delivered with the project implementation.
- (c) Storage
- (i) Recommend an appropriate storage configuration to satisfy the City's production, test, development and other appropriate (such as training and/or research) live production and historical data storage demands, providing reliability, availability and performance
- (d) Database
- (i) The City prefers Oracle 9i Standard Edition based on existing staff skill sets, and will consider others based on their overall merits with regards to their capability to best meet the City's needs as recommended by the Offerer. Recommend a fully functional Relational Database Management System (RDBMS) software solution that will fulfill all application system functional requirements, provide full online back-up, recovery and reorganization facilities including database transaction logging and up-to-the- minute forward recovery, plus timely automated reporting of actual or potential errors or problems.
  - (ii) The City is currently licensed for a range of Oracle database assets and so the Offerer should make the inclusion of any Oracle system software licenses and maintenance an optional portion of the bid (to be exercised at the discretion of the City).
  - (iii) Describe the methods employed for performance and tuning
  - (iv) Describe warranty terms and maintenance provisions and services related to the recommended server hardware and software configurations. Please include all license, maintenance, warranty and support agreements
  - (v) Provide a list of appropriate technical courses related to the installation and technical support of the RDBMS including formal courses, online tutorials, computer based training, prices and locations
  - (vi) Describe online help/documentation and hardcopy documentation delivered with the project implementation for the proposed database software

- (e) Network
  - (i) Confirm that the application software supports TCP/IP as a communication protocol and Ethernet for LAN connectivity
  - (ii) Describe the network requirements for server to client (and server to server) communications. These should specify the minimum recommended network bandwidth and latency requirements for average transactions and for any normal system management functions.
  - (iii) Describe any options to minimize network bandwidth requirements for server to client (and server to server) communications over low speed network connections (less than 1 Mbps).
- (f) Client Platform
  - (i) Describe the certified hardware and operating system platforms for the client tier with both minimum and recommended configurations

#### E8.4 Systems Management

- (a) Application management tool requirements inspect how configuration application changes and performance are managed consistently across application elements. With client/server a significant portion of computing moves from a centralized environment to the multiple desktops of the organization. The software vendor's method of managing and distributing versions, debugging, problem management, change management, and optimization tools will be assessed. The degree of fit with current and future commercial management tools for client/server should also be assessed. Offerers should describe any functions, architectures or solutions that provide ease of application administration. Both GUI and command line, local and remote administration should be provided.
  - (i) Offerer should recommend any native/optional end-to-end application performance monitoring, tuning and diagnostic tools (this should also include vertical management – like server hardware, operating system, storage, RDBMS, printer, network elements). Offerer should describe how these may integrate to BMC's Patrol and MS MOM.
- (b) Capacity Management
  - (i) Offerer should recommend any native/optional end-to-end application capacity planning tools (this should also include vertical management – like server hardware, operating systems, storage, RDBMS, printer, network elements). Offerer should describe how these may integrate to BMC's Patrol and MS MOM.
- (c) Problem Management
  - (i) Offerer should recommend any native/optional end-to-end application problem management tools (this should also include vertical management – like server hardware, operating system, storage, RDBMS, printer, network elements). Offerer should describe how these may integrate to Remedy's ARS.
- (d) Change Management
  - (i) Offerer should recommend any native/optional end-to-end application change management tools (this should also include vertical management – like server hardware, operating system, storage, RDBMS, printer, network elements). Offerer should describe how these may integrate to Remedy's ARS.
- (e) Backup/Recovery Management
  - (i) Offerer should recommend any native/optional end-to-end and incremental application backup/recovery management tools (this should also include vertical management – like server hardware, operating system, storage, RDBMS, printer, network elements). Offerer should describe how these may integrate to IBM's TSM.
- (f) Job Scheduling Management

- (i) Offerer should recommend any native/optional end-to-end application job scheduling tools (this should also include vertical management – like server hardware, operating system, storage, RDBMS, printer, network elements).
- (g) Security Management
  - (i) Describe how external users can securely access the application.
  - (ii) Describe how City Staff can securely access the application to utilize all application management functionality.
  - (iii) Describe how the application secures data, transactions, and the application configuration tool/process by userid, date and time stamps, TCP/IP port number or other mechanisms.
  - (iv) Describe how the application enables the assignment of userids/passwords, setting of password expiration, criteria, resetting of passwords, facilitates single sign-on to all modules, handles unsuccessful logon lockout and provides summarized/detailed reports on usage.
  - (v) Describe how Microsoft Active Directory can be used to facilitate application authentication and authorization. Describe how the application system impacts Microsoft Active Directory (schema, special rights, etc).

## **E9. SOFTWARE VENDOR SUPPORT AND PROFESSIONAL SERVICES**

### **E9.1 Installation Support**

- (a) Experience
  - (i) Describe the extent of your installation capabilities (skills of team, process, scheduling & project management, same team for entire installation, documentation etc.)
- (b) Ongoing Support
  - (i) Confirm the extent to which the business application software has reliable and available, direct or third party hotline support, appropriate response time, an urgent call process, proactive support and advanced systems monitoring, and post-installation consulting. Describe the above, including but not limited to: ease of access, knowledge of staff, speed and quality of response and being kept informed (regularly updated lists of bugs and fix dates, content and implication of new product releases etc.)

## **E10. WARRANTY**

E10.1 Include a complete description of your system warranties.

## **E11. UPGRADES**

E11.1 Briefly describe your process for system upgrades, and provide costs in Appendix 6. Confirm your accountability for system underperformance or compromise resulting from the upgrade process. Confirm your responsibility for fixing bugs and software problems.

## **E12. MAINTENANCE SUPPORT**

E12.1 Include a sample of the software maintenance support agreement.

E12.2 Describe the degree of availability (e.g. 24 x 7, 24 x 6 or 5) of your hotline support. Are there extra costs for certain services? How are extra services priced? Provide all cost considerations in Appendix 6.

E12.3 Include the cost for three (3) years of software maintenance support upfront as a separate item in the detailed pricing.

E12.4 The maintenance support shall start after total performance and training have been completed.

**E13. TRAINING**

E13.1 Describe your standard training program for users, and any documentation and manuals that come with it.

E13.2 Provide costs and confirm what flexibility can be built into these training arrangements.

E13.3 Briefly outline alternatives available, and lessons learned from past implementations.

E13.4 For the purpose of evaluation assume training to mean:

- (a) Daily rate for one business day;
- (b) Five (5) contiguous business days minimum;
- (c) Small group format of up to six people;
- (d) City provided facility and computer equipment.