Commonwealth of Massachusetts Massachusetts Gaming Commission





Request for Responses (RFR) For Central Monitoring System MGC-CMS-2015

LATE RESPONSES WILL NOT BE CONSIDERED.

Key Procurement Dates	Date
RFR distributed	October 24, 2014
Written questions from interested bidders concerning RFR due	November 3, 2014
Written responses from MGC posted on Comm-BUYS	November 10, 2014
Bidders' responses due	November 17, 2014
Evaluation Committee reviews responses and selects finalists	November 24, 2014
Evaluation Committee interviews finalists	December 1-4
Best and Final Offers	December 5, 2014
Report to Commission from finalist on benefits of CMS	December 18, 2014
Possible vote by Commission to award contract	December 18, 2014

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Encouraging and Providing Support to Qualified Bidders

The Massachusetts Gaming Commission ("MGC" or "Commission") recognizes that the types of firms skilled at performing the tasks envisioned by this procurement may not have experience in working with the Commonwealth of Massachusetts' procurement processes. The MGC would very much like to encourage capable firms to participate in this procurement.

In order to assist such firms the MGC has put in place the following mechanisms to make this procurement as available as possible to all potential participants;

1. Potential Bidders are encouraged to submit questions about both the substance of the RFR and any submittal process, logistics or questions about forms and submittal requirements. Questions can be submitted as indicated in this RFR Section 3.2 at any time from the date of posting to Comm-BUYS until November 10, 2014.

The MGC recommends that firms make use of these timeframes to assure that their proposals are compliant with state procurement regulations. Due to the public nature of any state procurement, the MGC must adhere rigorously to procurement rules but is very interested in helping firms to understand and comply with the rules.

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1 INTRODUCTION/PROCUREMENT REQUIREMENTS

This Request for Response (RFR) is issued by the Commonwealth of Massachusetts Gaming Commission (MGC). The purpose of this RFR is to solicit bid proposals for an organization or to work with the MGC to coordinate all activities related to regulating and monitoring electronic gaming devices (EGD) for one slot parlor licensee and up to three casino resort licensees.

The intent of this RFR is to gather information from CMS vendors to provide information to the Commission on the benefits of a CMS in comparison to traditional manual processes of regulating EGDs as well as provide a discussion around the return on investment of a CMS. The Commission is not guaranteeing a contract from this procurement, nor will it reimburse any vendor for the costs associated with responding to this RFR or presenting to the Commission. It is the responsibility of the recommended vendor to present a case to the Commission for a decision on whether the benefits of a CMS outweigh the costs.

The Commission may award a contract, to a responsible bidder whose proposal conforms to this RFR and is most advantageous to the Commonwealth, price and other factors considered.

The Commonwealth, reserves the right to procure all, none, or separately procure individual requirements that are the subject of the contract during the contract term, when deemed by the MGC to be in the Commonwealth's best interest

The MGC may enlist the services of a firm with experience to assist the MGC in regulating licensees consistent with the criteria included in this RFR and set forth in the Gaming Act and the MGC's regulations.

The Gaming Act and the applicable regulations can be found at:

http://massgaming.com/about/expanded-gaming-act/

http://massgaming.com/licensing-regulations/phase-2-regulations/

The Commonwealth's Standard Terms and Conditions version http://www.mass.gov/osc/docs/forms/contracts/comm-termsconditions.pdf will apply to all contracts or purchase agreements made with the MGC. These terms are in addition to the terms and conditions set forth in this RFR and should be read in conjunction with them unless the RFR specifically indicates otherwise.

1.1 Background

The Massachusetts Gaming Commission is responsible for the creation of a fair, transparent, and participatory process for implementing the Expanded Gaming Act passed by the Legislature and signed by the Governor in November, 2011 (Massachusetts General Laws, chapter 23K or "Gaming Act"). In creating that process, the Commission will strive to ensure that its decision-making and regulatory systems engender the confidence of the public and participants, and that they provide the greatest possible economic development benefits and revenues to the people of the Commonwealth, reduce to the maximum extent possible, the potentially negative or unintended consequences of the new legislation, and allow an appropriate return on investment for gaming providers that assures the operation of casino-resorts of the highest quality is responsible for assisting the Governor of the Commonwealth of Massachusetts in fulfilling the duties of the Executive Office pursuant to Part II, c. 2, § 1, of the Massachusetts Constitution.

The Gaming Act authorizes the Commission to award no more than three Category 1 licenses (defined as "Destination Resorts" with a minimum capital investment amount of \$500,000,000) and no more than one Category 2 license (defined as "Slots Parlor" license with a minimum capital investment of \$125,000,000.

The Commission began a two-phase solicitation in the fall of 2012, and has completed Phase 1 and Phase 2 for Category 1 Regions A and B, and Category 2 facilities. Phase 1 was determination of suitability of the gaming applicants. Applicants determined to be suitable proceeded to Phase 2 of the process.

Phase 2 included the site-specific proposal from gaming applicants.

The scope of this RFR entails the services of a vendor to work with the MGC in monitoring and regulating all aspects of electronic gaming devices for category 1 and category 2 licensees.

1.2 Objective

The Massachusetts Gaming Commission (MGC) is seeking to gather information from CMS vendors to provide information to the Commission on the benefits of a CMS in comparison to traditional manual processes of regulating EGDs as well as provide a discussion around the return on investment of a CMS. If the Commission deems a CMS to be a wise endeavor, the Commission may enlist the services of a CMS vendor. The CMS vendor will work with the MGC staff to open gaming establishment slot operations compliant with MGC regulations, as well as provide day-to-day support to staff in monitoring and regulating EGD operations of licensees. Respondents should have the experience referenced in section 2.2.4.2 of this document.

The apparent successful bidder should be familiar with Massachusetts Gaming Law (chapter 23K), have a track record and experience in operating/or monitoring in similar jurisdictions. The apparent successful bidder will also be required to have no conflicts of interest with any gaming licensees or potential partners/contractors/subcontractors to gaming licensees.

1.3 Vendor Qualifications

The preferred vendors will have the capacity to commit personnel and resources necessary to provide high quality services in a timely and responsible manner for the duration of the contract and any options to renew.

Respondents to this RFR should possess the qualifications and experience referenced in section 2.2.4 of this document in order to perform the work as detailed in Section 5 of this RFR.

1.4 General Procurement Requirements

MGC is exempt from state procurement requirements but this RFR is being issued in accordance with 801 CMR 21.00, which governs the procurement of services by state agencies. MGC reserves the right to cancel or modify the procurement scope and/or process at any time and without notice.

801 CMR 21.00 requires a competitive procurement process, including the issuance of a RFR for acquisitions of all commodities and services. Words used in this RFR shall have the meanings defined in 801 CMR 21.00. All responses must be submitted in accordance with the specific terms of this RFR.

MGC makes no guarantee that a contract, or any obligation to purchase any commodities or services, will result from this RFR.

MGC reserves the right to amend this RFR at any time prior to the date the responses are due. Any such amendment will be notified in writing to bidders. (See also **Section 6.5**). All responses must be submitted in accordance with specifications in **Section 3: Response Requirements**.

1.4.1 Procurement Characteristics

- 1. Acquisition method: Firm fixed price as monthly fee; additional quantities
- 2. <u>Single or multiple vendor(s)</u>: Single
- 3. <u>Use of Procurement by single or multiple agencies</u>: Multiple
- **4.** Anticipated Duration of Contract: The initial duration of the possible contract that may results from this RFR shall be ten (10) years from the date on which it is awarded. The contract may be extended in any increment at the discretion of MGC up to a maximum term, including all contract extensions, of fifteen (15) years.
- **5.** Anticipated Payment Structure: The contractor will be paid for services rendered, after submission and approval of invoices.

1.4.2 Procurement Timetable

Unless otherwise specified, the time of day for the following events shall be between 9:00 a.m. and 5:00 p.m., Eastern Standard Time. All other times specified in this RFR are Eastern Standard Time. The Cost Proposal may be submitted in the same package as the rest of the response, but must be RFR Central Monitoring System MGC-CMS-2015

submitted <u>under separate cover in a separate sealed envelope</u> labeled "Cost Proposal". Failure to meet this requirement will result in disqualification of the bid. Responses and attachments received after this deadline date and time will not be evaluated. A facsimile response will not qualify as a "submission" for deadline purposes in advance of or in lieu of a hard copy submission. **RESPONSES ARE DUE NO LATER THAN 5:00 PM ON November 17, 2014.**

MGC may adjust this schedule as it deems necessary. Notification of any adjustment to the RFR Timetable will be communicated to Bidders directly by the MGC.

LATE RESPONSES WILL NOT BE CONSIDERED.

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The MGC has determined that the Procurement Management Team (PMT) will conduct interview(s) of finalist(s) if needed. The dates for those interviews have been tentatively set for December 1-4. Bidders are asked to consider at least one of those dates as potential dates for oral presentations.

2 RESPONSE REQUIREMENTS

2.1 General Submission Instructions

Complete responses must be submitted by the date listed in the Procurement Timetable, **Section 1.4.2**, no later than 5:00 p.m., Eastern Standard Time. Responses must be as directed below to:

Derek Lennon
Chief Financial and Accounting Officer
Massachusetts Gaming Commission
84 State Street, 10th Floor
Boston, MA 02109
617-979-8454
mgcprocurements@state.ma.us

The bidder may submit their response electronically via email or by submitting the quote via CommBuys.

If submitting via CommBuys

The Massachusetts Gaming Commission of the Commonwealth of Massachusetts is soliciting responses for the Central Monitoring System. Bidders are advised that the Massachusetts Gaming Commission

- 1. Restricts submission of written questions to the Bid Q&A tool
- 2. Requires all responses to be submitted using the online submission tools available to active COMMBUYS account holders only
- 3. Requires submission of a Supplier Diversity Program (SDP) Plan as specified in the RFR file attached to this Bid.

Bidders are solely responsible to monitor this site for Bid amendments, if any. Bidders may monitor the record by frequently checking the Header Information for the list of Amendments. Bidders with active COMMBUYS accounts may also monitor the record through COMMBUYS email notification and record tracking tools enabled when a vendor acknowledges receipt of a bid. To establish a COMMBUYS account, bidders must select the Register link on www.commbuys.com and complete the online subscription process.

In order to assist you in responding to this RFR please follow the attached job aid <u>Create a Quote in COMMBUYS</u> which is also included in the attached forms.

If submitting via email (electronically) delivery:

• Submission must be received at the following email address mgcprocurements@state.ma.us on or before the date and time listed in this document (submissions even slightly late will not be accepted even if the delay is not caused by the organization submitting the proposal).

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- Sending party is solely responsible for ensuring receipt at the MGC by the proper time and date. The MGC will provide a return email confirming receipt within 2 hours of receipt of the email. It is therefore highly recommended (but not mandatory) that bidders submitting electronically transmit their response at least two hours prior to the closing deadline in order to have sufficient time to re-submit should there be a failure in receipt.
- Provide a single PDF electronic copy of the technical proposal in electronic form.
- Provide a single PDF electronic copy of the financial proposal in electronic form.
- Bidders may call the MGC at 617-979-8454 to determine if the MGC is in receipt of their submission. However, only an email receipt confirmation will be considered authoritative if there is a dispute.
- Provide one (1) original document with original signatures which must be physically delivered to the MGC within three days of the official due date.
- Technical proposals must be separately packaged from the financial proposal and the financial proposal must be in a separately sealed envelope.

2.1.1 Complete Response

A complete response in the following format:

- Executive Summary (Not to Exceed 5 Pages)
- Technical Proposal (Not to Exceed 50 Pages)
 - Including Appendix B
- Financial Proposal (Using Format in Appendix C)
- Return on Investment Analysis (Section 2.2.6)
- Economic Benefit Analysis (Section 2.2.5)
- Marketing material, publically available sales information, unnecessary samples, attachments or other documents not specifically asked for should not be submitted.

2.2 Technical Proposal –

This section provides specific instructions for submission of the Vendor's Technical Proposal. Adherence to the required organization and numbering will allow the Evaluation Committee to "map" the RFR requirements directly to the Vendor's responses by paragraph number and facilitate a fair and uniform review process. In addition, the Proposal shall:

- 1. Be prepared in a clear and concise manner.
- 2. Address all points of this RFR. The Vendor shall regard specifications in this RFR as mandatory.

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- 3. Be organized and numbered in the same order as given in the RFR, using the correct subsection and paragraph number for each specification. For example, Section 2.1 Para 1; Section 3.2 Para 4; etc.
- 4. Not include in the Technical Proposal any reference to prices proposed by the Vendor.
- 5. Include in the Technical Proposal the specific sections referenced from section 5.

2.2.1 Title and Table of Contents

The Technical Proposal should begin with a title page bearing the name and address of the Vendor and the name and number of this RFR, followed by a table of contents.

<u>Confidential Information:</u> Information that is claimed to be proprietary or confidential is to be labeled accordingly throughout the text and a summary of those sections is to be placed after the Title Page and before the Table of Contents in the Vendor's Technical Proposal, and if applicable, also in the Financial Proposal. Only those portions that can reasonably be shown to be proprietary or confidential may be identified as such.

2.2.2 Executive Summary

- 1. The Vendor shall condense and highlight the contents of the Technical Proposal in a separate section titled "Executive Summary" not to exceed five pages in maximum length.
- 2. The Vendor shall state whether or not it meets the Vendor Minimum Requirements (Section 1.3) and provide verification of compliance.
- 4. The Summary shall identify any exceptions the Vendor has taken to the requirements of this RFR, the Mandatory Contractual Provisions or any other attachments. If a Vendor takes no exception to the State's terms, conditions and requirements, the Executive Summary should so state. By submitting a proposal in response to this RFR, the Vendor shall be deemed to have agreed to and accepted all mandatory contract terms and conditions set forth in the standard contract form, unless otherwise noted.

Warning: If there is any item, including any standard clause provision with which the Vendor cannot or will not comply, such exception must be clearly noted and explained, including the degree to which the Vendor may consider some degree of compliance. Exceptions to terms and conditions may result in having the proposal deemed unacceptable or classified as not reasonably susceptible of being selected.

- 5. The Vendor must provide a statement of intent to comply with the terms, conditions and requirements of Sections 6, and provide any information required by these Sections.
- 6. The Vendor must provide a statement of intent to comply with the terms, conditions and requirements of Section 5.

2.2.3 Vendor Technical Response to RFR Requirements

The Vendor shall address all requirements as described in Section 5 of the RFR and describe in the Technical Proposal how it proposes to meet each requirement. If the Commission is seeking the Vendor's agreement to a requirement, the Vendor shall state agreement or disagreement.

As stated above, any exception to a term, condition or requirement may result in having the proposal deemed unacceptable or classified as not reasonably susceptible of being selected for award. Any paragraph that represents a work requirement shall include a detailed explanation of how the work will be done.

<u>CMS</u> Requirements <u>Checklist</u> - The Vendor must submit a thoroughly completed CMS Requirements Checklist (Appendix B). This Checklist covers many of the requirements and will provide conformity in presenting the Vendor's proposed CMS capabilities for addressing the Commission's requirements.

In this Section the Vendor may expand upon the requirements, provide detail regarding how it will accomplish the requirements, describe best practices, etc.

Specifically, in this Section the Vendor's Proposal should address, but not be limited to, the following and not exceed a maximum of 50 pages not including technical charts and appendices:

2.2.3.1 General

Provide an Overview of System and procedures.

2.2.3.2 CMS

- a) Describe the CMS configuration/redundancy.
- b) Describe what platform (operating system) the CMS runs and what are the pros/cons of using this platform.
- c) Describe the communications protocols that the CMS supports, including whether the protocols are open or proprietary, other jurisdictions that are currently using these protocols, types of games supported by the protocols, and a listing of manufacturers of gaming devices presently authorized to use this protocol.
- d) Describe how the CMS is connected to the individual EGDs at a Facility.
- e) Provide additional information on software and hardware solutions for monitoring and managing each facet of the system, network, data and each site.
- f) Discuss and provide examples of accounting and performance reports that are a standard part of the CMS.
- g) Describe how progressive and participation games are handled, which may be operated by the Facility or another entity separate from the CMS. Discuss meter management and reporting, performance tiers and participation fee accounting and reporting.
- h) Provide information on overall asset tracking and management. What information regarding each asset can be tracked by the CMS, or is a separate system being proposed? Areas of interest include, service history, costs, depreciation, hardware inventory and location.

2.2.3.3 Primary and Back-up Sites

- a) Describe the Primary Site lab operations and testing. Provide additional information on the process for testing new chips and network equipment. Discuss needs for lab initialization and operations.
- b) Identify and describe the location of the Back-up Site.

2.2.3.4 Telecommunication Network

- a) Beginning at the Facility, describe the techniques, hardware, software and communication links that will be employed to ensure that communications and CMS support of EGD operations will not be lost.
- b) Explain in detail how the CMS will deal with communications interruptions to a EGD Facility. Describe the approach to guaranteeing that EGD machine events/condition messages, meter readings, and commands issued by the CMS are not lost due to a communications interruption.

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c) Describe the techniques, hardware and software that will be employed within the Facilities to ensure communications between the EGDs and CMS shall not be lost.

2.2.3.5 Disaster Recovery

Provide processes on how systems are connected and configured to ensure maximum availability. In the event of loss of functionality provide Component Failure Analysis and procedures for recovery.

2.2.3.6 Security

What processes and control procedures are implemented internally to ensure CMS integrity? For example:

- a) How is virus protection handled, updates, vulnerabilities?
- b) Are there regular reviews of security functions and physical security for the CMS?
- c) Are segregation of duties and least privilege assignments for employees implemented?
- d) How is the network secured and reviewed for security vulnerabilities?
- e) What are the backup and restore procedures for databases and Central System?

2.2.3.7 Manuals and Documentation

Provide description/examples of manuals/documentation.

2.2.3.8 Staffing

Describe the staffing model for implementation and post implementation of the CMS. The staffing model should correspond to the proposed work breakdown structure, project schedule and overall project management plan. The staffing model shall include but not be limited to the type of resources necessary to implement the CMS and support the CMS post implementation, job functions, experience, education, training, certifications, work locations, and availability/work schedule. Include the names and titles of resources designated as key personnel.

Provide a description of how the following scenarios would be accomplished in the implementation and post implementation staffing models:

- 1. Code development and migrations; Identify any 3rd parties or sub-vendors that will be used to write code.
- 2. CMS Testing
- 3. Report Creation/Development/Distribution
- 4. Ad-hoc reporting requests
- 5. Server/hardware/network administration Data Center, WAN
- 6. Issue resolution
 - a. Hardware at the Data Center and the Facility
 - b. Software
 - c. Communication/Network at the Facility
 - d. Financial Variance
 - e. Undefined /General

2.2.3.9 Maintenance, Service Levels & Support

- a) Describe the service and maintenance program, to include reporting procedures.
- b) How will this requirement be fulfilled at each Facility? Will the Vendor have on-site personnel to respond to CMS issues at each Facility or will Vendor's maintenance staff be "on-call"? How will Vendor's staff interact with and rely upon the Facility staff?
- c) Describe procedures for problem reporting, tracking, escalation and dispute resolution.
- d) Identify the physical location of proposed Hotline call center and describe the prioritization / escalation of calls and response time guarantees.

2.2.3.10 Acceptance Testing

Provide an overview of support procedure for Acceptance Testing.

2.2.3.11 Implementation Plan

The Offer shall provide with its Proposal an Implementation Plan. The Vendor shall provide details including charts (Gantt, PERT, or similar) identifying the major milestones to be accomplished for the equipment delivery, software programming, installation and testing (Note: Within thirty (30) days of possible contract award the successful Vendor shall submit a detailed and finalized version of this Implementation Plan which, when approved by the Commission, shall become the basis for Implementation.)

- a) Provide a detailed communication plan for the deployment and implementation of the CMS, including all key stakeholders (i.e. Commission, EGD Facilities, EGD manufacturers, EGD testing and certification Vendor, etc.)
- b) What is the Vendor's estimate of the time it will take from contract start date to have the CMS fully operational to support the first EGD Facility in operation? Activities and tasks should include: site planning, hardware installation, Facility wiring, training, testing, go-live, post installation support and site turnover.
 - Facility Planning/CMS Vendor Requirements
 - Facility Hardware Installation
 - Facility Wiring
 - Facility Turn-up
 - Facility Testing
 - CMS Training for Facilities
 - Coordination of Floor Moves
 - Coordination of Maintenance
 - Facility Point of Contact

- c) Bringing up a subsequent Facility while still operating one or more other Facilities with no interruption of operations. How would the Vendor support getting multiple EGD Facilities operational (say 4 in one calendar quarter)?
- d) Describe the Vendor's expectations and requirements for the availability of Commission resources to support its implementation activities as outlined above.

2.2.3.12 EGD Facilities

a) Describe CMS Vendor Space, equipment and infrastructure requirements at the Facilities.

2.2.3.13 Server Based Downloadable Gaming

Describe the CMS's capabilities for centrally monitoring, authenticating and reporting regarding Server Based Downloadable Gaming

2.2.4 Vendor's Organization, Background, and Financial Stability

2.2.4.1 Organization and Structure

The Vendor should provide any information about its business and/or organization that demonstrates its capabilities to fulfill the scope of services detailed in Section 5 Technical Specifications of this RFR. The Vendor shall describe its organization and its structure, to include:

- 1. A brief history of the company.
- 2. The exact name of the Vendor submitting the proposal; the type of business entity (e.g., corporation, partnership, etc.), and the place of the Vendor's incorporation, if applicable.
- 3. The name, address and telephone number of key personnel, consultants, sales agents or other entities involved in aiding the Vendor's efforts to obtain this Contract pursuant to this RFR or otherwise assisting the Vendor.
- 4. Describe your organizational structure and staffing plan for the Commission's account. Provide an organization chart of the Vendor's organization showing:

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- a. All major divisions and units;
- b. Which components will perform the requirements of this Contract;
- c. Where the management of this Contract will fall within the organization;
- d. What corporate resources will be available to support this Contract in both primary and secondary, or back-up roles;
- e. Highlight positions on the chart who will work on this account and indicate for each the percent of time to be dedicated to the Commission's account. Include on the chart any new positions that would be created as a result of acquiring this account and provide a description of how these positions would be filled and when.
- f. Number of full time equivalent positions, at minimum, that the Vendor will commit to this account.
- 5. A list of all professional affiliations.

2.2.4.2 Background and Experience

The Vendor shall describe its background and experience related to EGD programs and other gaming activities. This experience must be under the Vendor's company name. Vendors shall describe how their organization can meet the requirements of this RFR and shall include:

- 1. Any relevant experience comparable to what is requested in Section V Technical Specifications:
 - Describe the Vendor's experience in developing, implementing and maintaining Central Monitor and Control Systems for EGDs
 - Does the Vendor have any CMSs currently in operation in support of EGDs, slot machines or other similar forms of gaming. If so, describe each system, the number and type of machines that it supports, how long the system has been in operation, etc. Compare the System being proposed for Massachusetts to these other systems.
 - The Vendor must describe its most recent three (3) engagements for other clients involving services similar to those requested by this RFR that were successfully performed by the Vendor;
- 2. Provide a list of current client accounts. Has your organization lost any client accounts within the last three (3) years? Why?

- 3. Provide a minimum of three (3) client references capable of documenting the Vendor's ability to manage projects of comparable size and complexity and two (2) references from other organizations, sub Vendor or service providers, which you think are relevant. Each reference must include the following information:
 - a. Name of client organization;
 - b. Name, title, telephone number and email address of Point-of-Contact for client organization;
 - c. Value, type, and duration of contract(s) supporting the client organization;
 - d. The services provided, scope of the contract, geographic area being supported, and performance objectives satisfied; and
 - e. An explanation of why the Vendor is no longer providing the services to the client organization, should that be the case

NOTE: The Commission shall have the right to contact any reference of its own choosing, or any other source, as part of the evaluation and selection process.

4. Provide a list of any current or previous contracts that the Vendor has had with any department or agency of the Commonwealth of Massachusetts, to include the contract name and number, contract term and contract amount.

2.2.5 Economic Benefit

The Vendor shall describe the benefits that will accrue to the Massachusetts economy as a direct or indirect result of the selected Vendor's performance of the possible Contract resulting from this RFR. The Vendor should take into consideration the following elements. (**Do not include any detail of the financial proposals with this technical information.**)

- 1. The percentage of Contract dollars to be recycled into Massachusetts's economy in support of the Contract, through the use of Massachusetts sub-Vendors, suppliers, and joint venture partners. Vendors should be as specific as possible, providing a breakdown of expenditures.
- 2. The numbers and types of jobs for Massachusetts residents created by this Contract. Indicate job classifications, number of employees in each classification and the aggregate payroll to which the Vendor shall be committed at both prime and, if applicable, sub Vendor levels.
- 3. Tax revenues to be generated for Massachusetts and its political subdivisions as a result of this Contract. Indicate tax category (sales tax, inventory taxes, and estimated personal income

taxes for new employees) and provide a forecast of the total tax revenues generated by this Contract.

- 4. The percentage of sub-vendor dollars committed to Massachusetts small business and MBEs.
- 5. In addition to the foregoing factors, the Vendor should explain any other economic benefit(s) to the State of Massachusetts that would result from the Vendor's proposal.

NOTE: Because there is no guarantee of any level of usage under the Contract, the Vendor should state its level of commitment per \$10,000 of Contract value. In other words, for each \$10,000 of Contract value, how many Massachusetts jobs will be created, what Commonwealth of Massachusetts tax revenue will be generated, how much will be paid to Commonwealth of Massachusetts sub-vendors, etc.

2.2.6 Return on Investment

The recommended vendor will be required to make a recommendation to the Commission on the benefits (both cost and efficiencies) of utilizing central monitoring system vs manual processes. Respondents to this RFR shall provide in writing with any accompanying details, analysis, spreadsheets, etc. answers to the following questions, and any additional information not contemplated by the questions below that can assist making a sound business case for utilizing a CMS vs manual processes:

- 1) Please provide a breakdown comparison of the annual estimated savings generated from initial startup of machines using central monitoring system vs the traditional format of using a GAT device and sealing machines. Please make sure to describe any assumptions and formulas used to generate your estimates.
- 2) Please provide an analysis for cost/investigation using a CMS system vs the traditional method. Please analyze based on the following investigations:
 - a) Jackpot Payouts
 - b) Customer Complaints of Machine Play
 - c) Machine variances
 - d) Chip revocations
 - e) Bill changer box pickup
- 3) Please provide a breakdown of the estimated savings per move of EGD compared to the traditional GAT and sealing of machines. Please provide an annual savings and then please provide a savings over the

life of the contract and any options to renew. Please make sure to describe any assumptions and formulas used to generate your estimates.

- 4) Estimated annual savings from verifying assets using the CMS vs the traditional GAT model.
- 5) Please provide the weekly hours that you estimate a CMS will free up a Gaming Agent to do additional investigations into other areas of the operator's gaming operations. Please make sure to describe any assumptions and formulas used to generate your estimates.
- 6) Reconciliation cost, benefit and/or is it an additional cost of using CMS
- 7) Is there greater transparency of the revenue and tax information with CMS?
- 8) Is there a deterrent effect of having independent information?
- 9) Are there cost savings due to regulatory efficiency?
- 10) Please provide any other benefits, and corresponding savings generated or additional revenue generated from utilizing a central monitoring system for managing EGDs vs a manual process.

2.2.7 Sub-vendors

Vendors shall identify all sub-vendors, if any, including sub-vendors used to meet the MBE goal of this RFR, and provide a complete description of the roles these sub-vendors will have in the Contract performance. The Commission reserves the right to require background investigations on any sub-vendor it deems to have a critical role in the Contract activities.

2.2.8 Required Forms

As part of their Technical Proposal <u>bidders are asked to either submit</u> the following Commonwealth-required forms, <u>or attest that they understand and subscribe with the terms set</u> <u>forth in those forms, and will submit those forms once selected</u>. All of the referenced forms are available on <u>www.mass.gov</u> website and can be found in the Response Template provided along with this RFR.

- Standard Contract Form and Instructions
- Commonwealth Terms and Conditions
- Massachusetts Substitute W-9 form Request for Taxpayer Identification Number and Certification

- Contractor Authorized Signatory Listing
- MA DOR Tax Compliance Certificate
- Executive Order 504 Contractor Certification
- Consultant Contractor Mandatory Submission Form
- Authorization for Electronic Funds Payment (EFT)
- Supplier Diversity Certification or Plan

2.2.9 RESUMES

Detailed resumes should be submitted for all management, supervisory and key personnel to be assigned to the contract. Resumes should be structured to emphasize relevant qualifications and experience of these individuals in successfully completing contracts of a similar size and scope to those required by this RFP.

3 RESPONSE EVALUATION PROCESS

3.1 EVALUATION PROCESS.

The RFR Evaluation Process will be conducted in three phases. Phase One Review will be conducted for all proposal submissions. The purpose of the Phase One Review is to eliminate any bids that are nonresponsive to the requirements of the RFR. Bids that are deemed to be qualified based on the Phase One Review will be submitted to the Procurement Management Team (PMT) for additional review (Phase Two Review). Only after the completion of Phase Two will the sealed cost proposals be opened and evaluated as a part of Phase Three. Prior to the final recommendation, the PMT reserves the right to request a "Best and Final Offer" from some or all of the Bidders. The PMT will consider any Best and Final Offers made in a reevaluation of Phase Three. The PMT will make a recommendation to the Commissioners who will then accept or reject the recommendation of the PMT.

(Phase One, Phase Two and Phase Three of this RFR will be evaluated separately).

- (a) <u>Phase One Review</u>: Bidders' responses will be reviewed based on listed criteria and completeness of response including mandatory attachments and compliance to submission criteria (refer to Section 2). Bids that do not comply with these components may be rejected and fail to proceed to Phase Two Review. The MGC reserves the right to waive or permit cure of non-material errors or omissions. Staff at the MGC will conduct this portion of the review.
- (b) Phase Two Review (Total 50%): Qualified bids, based on the Phase One Review, will be considered for additional review in Phase Two. Scoring criteria for the evaluation of proposals will be as follows:
- 15% –Similar Past Experiences RFR Central Monitoring System MGC-CMS-2015

- 20% Return on Investment
- 10% –Project Management Methodology
- 5%- Proposed approach to coordination process
- (c) Phase Three Review (Total 50%): Cost will be evaluated in relationship to the Phase Two Review and scoring of Bidders' responses. The Phase Two score will represent 50% and Phase Three Cost will represent 50%, in order to determine the "best value." MGC reserves the right to request a Best and Final Offer (BAFO). The successful bid will be determined based on the one that represents the "best value" overall, meets the needs of MGC and achieves the procurement goals.
 - 50% Cost Proposal: Cost will be evaluated based on the fee for services provided. Please use the form attached as Appendix C to provide your cost proposal

3.2 BIDDER QUESTIONS

Bidders are encouraged to submit written questions and receive written answers from the Procurement Management Team (PMT) regarding this Solicitation. Because this procurement may extend to firms not intimately versed in Commonwealth procurements, respondents are encouraged to ask whatever questions they need resolved to aid in producing a compliant response. All Bidders' questions must be submitted via email (no phone calls) to mgcprocurements@state.ma.us.

Please note that any questions submitted to the PMT using any other medium (including those that are sent by physical mail, fax, or voicemail, etc.) will not be answered. The Commonwealth reserves the right to either publically post questions exactly as asked by the submitter or to combine or adjust questions in order to minimize redundancy or potentially conflicting responses.

Bidders are responsible for submitting content suitable for public viewing. Bidders must not include any information that could be considered personal, security sensitive, inflammatory, incorrect, collusory, or otherwise objectionable, including information about the Bidder's company or other companies. The PMT reserves the right to edit or delete any submitted questions that raise any of these issues or that are not in the best interest of the Commonwealth or this Solicitation.

Bidders may submit questions as detailed in the procurement timeline in Section 1.4.2. "Written inquiries from interested bidders concerning RFR" – during this time any Bidder may submit questions on any topics relating to the RFR that will help Bidders response, clarify requirements, or any other RFR related topics, including logistics, timing and submittal of proper forms.

3.3 ORAL PRESENTATIONS/INTERVIEWS.

After completion of Phase I, Phase II and Phase III, the PMT shall have the option to invite all or some Bidders to make oral presentations/come in for interviews. Bidders will not be informed of their rank at the time of the oral presentation/interview. Additionally, the PMT reserves the right to adjust any Phase II or Phase III score following any oral presentation/interview.

The time allotments and the format shall be the same for all oral presentations/ interviews. The PMT will give the Bidder at least three (3) business days' prior notice regarding the date of an oral

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presentation. The PMT may require the Bidders assign key personnel to conduct the oral presentation/interview.

A Bidder is limited to the presentation of material contained in its proposal, with the limited exception that a Bidder may address specific questions posed by the PMT or provide clarification of information contained in its proposal. A Bidder's failure to agree to an oral presentation/interview may result in disqualification from further consideration. Oral presentations/interviews may be recorded by MGC as a matter of public record.

3.4 RECOMMENDATION

After the PMT completes its evaluation, comparison and ranking of all proposals, and, if applicable, interview(s) and BAFO, the PMT will recommend a vendor to present information to the Commission at a public meeting on December 18, 2014 on the benefits of a CMS in comparison to traditional manual processes of regulating EGDs. The discussion will focus on the return on investment of a CMS. The Commission is not guaranteeing a contract from this procurement, nor will it reimburse any vendor for the costs associated with responding to this RFR or presenting to the Commission. It is the responsibility of the recommended vendor to present a case to the Commission for a decision on whether the benefits of a CMS outweigh the costs. The decision shall be based on the PMT's recommendation, the presentation by the recommended vendor and on the best interests of the Commonwealth. MGC is under no obligation to award a contract pursuant to this RFR.

4 FINANCIAL PROPOSAL

4.1 GENERAL

- **4.1.1** The Vendor must complete and submit the Financial Proposal Sheet provided in Appendix C. The Financial Proposal Sheet shall be the separate Financial Volume of the Vendor's proposal, and shall be submitted separately, sealed and clearly marked "Financial Proposal" in accordance with Section 2. The Vendor must provide complete price information for all services required. Offers to provide only partial services are not acceptable and shall be rejected. **Do not change or alter this Form or the Offer may be deemed unacceptable.**
- **4.1.2** The Vendor's proposed prices shall be fully loaded and expressly include overhead expenses (e.g., fringe benefits, administrative costs, profits, etc.), and all related and incidental expenses (e.g., travel) associated with providing all goods and services and equipment required by this RFR. No other amounts or costs will be paid to the Contractor. Specifically, no taxes or assessments or license fees or permits of any type will be paid in addition to the prices proposed on the Financial Proposal Sheet.

- **4.1.3** All prices proposed shall be firm fixed prices for the entire term of the Contract, to include the Renewal Option period, if exercised, and any other extensions.
- **4.1.4** If a Contract results from this RFR it will be an Indefinite Quantity Contract with Firm Fixed Unit Prices

4.2 CONTRACT PRICES

4.2.1 CENTRAL SYSTEM FEE

The Vendor shall state its proposed price to provide all goods and services, equipment, hardware, software and personnel required by this RFR for providing a Central System located at the Commission's primary data center, a hot back-up located off site, software, and all other Central System components required by this RFR, except for those requirements located at a specific Facility and the Telecommunications Network connecting the Facility to the Central System. The price shall be expressed as a Firm Fixed Price for the Monthly Flat Fee:as stated on the Financial Proposal Sheet-Appendix C.

4.2.2 EGD FACILITY FEES

The Vendor shall state its proposed price to provide all goods and services, equipment, hardware, software and personnel required by this RFR for providing a Central System which are required to be located at a specific Facility and the Telecommunications Network connecting the Facility to the Central System. One-time start-up fees and on-going monthly support fees for each Facility shall be provided. Prices shall be expressed as a Firm Fixed Price for the various Fees required as stated on the Financial Proposal Sheet-Appendix C.

4.3 INSTRUCTIONS FOR APPENDIX C -FINANCIAL PROPOSAL SHEET

- Appendix C is to be completed by the Vendor and signed in ink by an individual who is authorized to bind the Vendor to all prices offered. Any erasures or alterations must be initialed by the signer in ink.
- All prices must be recorded with five decimal places if a percentage (e.g. 0.00000) and with dollars and cents if a dollar amount (e.g. \$00.00)
- All prices must be the actual price that the State will pay for the proposed item and may not be contingent on any other factor or condition.
- Nothing shall be entered on the Financial Proposal Sheet that alters or proposes conditions or contingencies on the proposed prices.

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4.4 BASIS FOR AWARD/PAYMENT AMOUNT

The "Total Estimated 10-Year Contract Price" specified on the Financial Proposal Sheet-Appendix C is based on estimated dates for the startup of each Facility and estimated quantities for the number of EGDs to be in operation at the Gaming Facilities and will be used solely for price evaluation, comparison and selection for recommendation for award. The quantities indicated are not a guarantee of any minimum or maximum amounts under this contract and may change at any time during the term of the contract, or renewal option period if exercised. The amount to be paid to the Contractor shall be calculated using the Firm Fixed Prices specified on the Financial Proposal Sheet and the actual Facilities and number of EGDs located at those Facilities.

5 TECHNICAL SPECIFICATIONS/SCOPE OF WORK

The Commission is highly sensitive to the potential for conflicts of interest. The qualified bidder will have no current or on-going work with a gaming licensee in Massachusetts. However, it is important to note that past experience with any or many of the gaming applicants or other gaming operators may be seen by the MGC as an advantage, as long as no current involvement with a gaming licensee exists. As discussed in the Evaluation section of this RFR (section 3) the MGC will carefully review and assess each example where bidders have worked with gaming applicants or gaming operators to determine the extent to which this is an advantage or disadvantage for the bidder as it relates to this procurement. Past work for a current gaming licensee is not a disqualifying factor in the selection of a project manager firm, but but must be disclosed to the Commission as part of the response to this RFR.

Respondents are asked to describe prior work and the nature of such work for any gaming applicants or gaming operators (if any) during the last 10 years. For a list of the current applicants for a gaming license, please see Attachment A. Respondents must disclose all work within the last 10 years (including currently scheduled or on-going work) done for current applicants or for gaming operators.

5.1 GENERAL

5.1.1 The Commission may decide to enter into a contract with a qualified Vendor to provide the design, development, implementation, lease, operation, and maintenance of a Central Monitoring and Control System ("Central Management System or CMS") for Electronic Gaming Devices (EGD's) which includes, but is not limited to, a central computer system located at the Commission's designated location, a hot back-up system located off-site, software, and a secure Wide Area Network that will connect each Commission regulated facility and all EGDs to the Central System as described more fully in this RFR.

- **5.1.2** The operating model preferred by the Commission is one where the infrastructure (servers and storage) necessary for both the Primary and Back-up sites called for in this document be colocated with MGC's Primary and Secondary Data Centers. MG's current co-location services are at One Summer Street in Boston, and the Commonwealth's Springfield Data Center (Q1-2015). It should be noted that during term of this engagement, use of the Markley / One Summer Street for co-location services may be replaced with the Massachusetts Information Technology Center (MITC) in Chelsea. The Commission is open to other operating models, however concerns about data security and sovereign immunity for data stored "in the cloud" or outside of Massachusetts must be addressed.
- **5.1.3** Vendors must submit proposals encompassing all of the services required in the RFR and may not submit proposals for only certain services of the RFR.
- **5.1.4** The Vendor shall continuously coordinate the implementation of the CMS and Wide Area Network with each of the Gaming Facility Operators to insure the smooth and timely installation of all components at the Facilities.
- **5.1.5** The Vendor shall continuously coordinate the implementation of the CMS and Wide Area Network with each of the Facility Operators.
- **5.1.6** The Vendor shall be responsible for all costs, coordination and maintenance as they relate to the design, installation, training, testing, operations and support of the CMS environment. Areas of the Vendor's responsibility specifically include, but are not limited to;
 - **5.1.6.1** All primary and back-up site communication lines, computer system components and peripheral equipment, including data center environmental equipment, mainframes/servers, front-end communications processor(s), printers, and tape drives.
 - **5.1.6.2** All communication lines and equipment to each EGD Facility.
 - **5.1.6.3** All equipment at the EGD Facility necessary for communicating with the Primary Site, Back-up Site, the EGD floor, and each EGD within each EGD bank.
 - **5.1.6.4** All cabling infrastructure within each Facility (installation, termination and testing).
 - a) From the Point of Entry in a Facility to the CMS Wiring Closets

- b) From the CMS Wiring Closet to each EGD Bank
- c) From the EGD Bank to each EGD
- d) From the CMS Wiring Closet to EGD Facility back offices requiring connectivity or access to the CMS. Areas include the accounting department for invoicing and Commission offices for monitoring or reporting
- e) From each facility to CMS Primary and Back-up Data Centers, as well as the Commission's Network Operations Center in Boston
- **5.1.6** Dispute Resolution The MGC CMS Project Manager shall have the final authority to resolve any disputes between the Vendor and the EGD Facilities, EGD manufactures, etc. Failure to meet performance requirements may result in the assessment of liquidated damages by the MGC.
- **5.1.7** Player Tracking Systems and Ticket-In/Ticket-out The Facilities may install their own player tracking systems. The CMS shall be totally independent of any such player tracking system and the Vendor shall have no responsibility for the installation, management or support of these Facility systems. The Vendor and CMS shall be responsible for the polling and reporting of EGD accounting and Ticket-in/Ticket-out meters.
- **5.1.8** The Commission may enter into a contract with a qualified Vendor who can offer for use at in the future, integrated functionality for implementation of software based components of MGC's Responsible Gaming framework. The functionality should include use of the Gaming Standard Associations informed player class, and the ability to drop Responsible Gaming messaging and software to the EGD level. This feature may include, but is not limited to, an interface to a locally hosted player tracking system located at each of the Licensee sites.
- **5.1.9.** The Commission requests that Vendor's proposals include an Operational Model and cost structure that would allow for transition of operational support for the CMS application and/or network monitoring to MGC staff.
- **5.1.10** Innovative approach The Commission is open to Vendor's proposing a solution that differs from the approach and technical details that are articulated in this RFR.

In response to Section 5.2 - 5.15 below, the Vendor must provide in its proposal a statement of intent to comply with the terms, conditions, and requirements of those specifications.

The following sections describe the **SCOPE OF WORK** for the providing of a Central Monitoring and Control System ("Central Management System or CMS") for Electronic Gaming Devices (EGD's). The Vendor shall deliver all requirements and shall be responsible for all technical functionality and business support.

- Installation and initial start-up of the Central System located at the Commission's primary data center, a hot back-up located off site, software, and all other CMS components, except Telecommunicates Network and equipment installed at a Facility;
- Installation of all equipment related to the CMS that is required to be located at each Facility to support the initial number of EGDs upon opening and the Wide Area Network connecting each Facility to the C and
- Subsequent to the opening of a Facility, the support of additional EGDs that may be added.

It is anticipated that the Commission will issue multiple work orders over the Contract term, or any extension thereof. However, the Commission may not proceed with any portion of the work anticipated by the Contract and the Vendor shall not perform any such work unless a written work order is issued by the Commission.

5.2 CENTRAL MONITORING AND CONTROL SYSTEM ("CMS")

5.2.1 GENERAL REQUIREMENTS

The Vendor shall provide a CMS with comprehensive functionality which shall include, but not be limited to, gaming activities, sales, validations, inventory management, marketing support, and information management reporting. The Vendor shall provide the following to the Commission on a lease basis for the duration of this Contract and any extension thereof:

- 1. Computer hardware and software, with full redundancy, and Wide Area Network to support EGD operations.
- 2. A CMS which shall meet all performance requirements specified in this RFR.
- 3. A CMS which shall be operational each and every day (24 hours per day, seven days per week, three hundred sixty five/six (365/366) days per year), or during times established by the Commission.

- 4. Implementation, maintenance, day to day operation and resolution of outages on its portion of the Wide Area Network which links the EGD Facilities, devices and systems within the Facilities and any associated communication/networking equipment involved in the operation of the EGD network. There shall be no cost to the Commission or to the Facilities in resolving Telecommunication Network problems and/or repairs, including problems, which involve wiring or devices used to connect the EGDs to the CMS.
- 5. Any other item, equipment or facilities deemed necessary by the Commission for the efficient operation of the CMS.

5.2.2 OPERATIONS PROCEDURES

The Vendor shall:

- 1. Create and document the procedures for computer operations staff, especially regarding failure situations, in a straightforward manner.
- 2. Provide documentation on how the Central Management and Monitoring System will maintain the required availability and how upgrades will be performed with minimal downtime throughout the term of the statement of work.
- 3. Provide documentation on how the System is compatible with and will interoperate with all EGDs using current GSA industry standard protocols (G2S and S2S).
- 4. Document the processes and procedures on how the Commission shall be able to activate, monitor, de-activate, and re-activate an individual EGD up to a whole facility.

5.2.3 REDUNDANCY

The Vendor shall provide and operate Primary and Back-up Sites including, but not limited to, facilities, equipment and staff. The Vendor shall provide a telecommunication transport path between its Primary and Back-up Data Centers and the two Commission network host centers (co-located at the Primary Site and Back-up Site). The intent of the Commission is to assure CMS survival in the event of a major outage. Each of these transport paths shall be capable of supporting all of the gaming traffic, the traffic needed between the Data Centers, and the traffic between the Data Centers and the Commission.

The CMS computer shall be a state-of-the-art, fault-tolerant, redundant, high availability system. The CMS may be configured in a paired duplex, triplex or multi-redundant configuration with no shared peripherals. All computer system components and peripheral equipment, including front-end communications processor(s), system printers and tape drives must be similarly fault-tolerant and redundant and maintain high availability. No performance degradation or loss of system functionality shall occur with the failure of a single system component. The CMS's storage management solution shall provide fault tolerance and scalability. The remaining system(s) shall immediately assume the load in case of a failure in one system without loss or corruption of any data and transactions received prior to the time of the failure, with minimal service disruption and no loss of processing continuity.

Primary System recovery from a one-system failure shall be accomplished immediately while still maintaining current transactions. This includes the ability to fully service the communications network supporting the EGDs and management terminals.

Back-up System recovery from a Primary Site failure shall be accomplished immediately without loss of any transactions. This includes the ability to fully service the communications network supporting the EGDs and supplying management terminal functions.

5.2.4 CMS REQUIREMENTS

- 1. The CMS shall have the capability to support up to 20,000 EGDs and Facilities (4) authorized by the Commission and be scalable for future enhancement or growth. The CMS, as delivered and installed, shall be capable of supporting a network of 20,000 EGDs and associated controllers during peak transaction performance.
- 2. The Central System shall operate on a universally accepted gaming industry open protocol (e.g., Gaming Standards Association SAS, G2S, S2S) to facilitate the ability of the maximum number of EGD manufacturers to communicate with the CMS and shall be capable of controlling all brands and models of EGDs currently approved in a regulated jurisdiction.
- 3. The CMS shall provide the capacity for at least an eleven (11) digit dollar amount (\$99,999,999,999) for EGD sales.
- 4. The CMS shall be configurable and capable of future scaling and expansion of transactions, storage, Facility locations, and number of EGDs.
- 5. Alarms and monitoring devices shall be in place and shall automatically notify the Commission if the CMS goes down. All levels of sensing such as environmental and system/network

availability shall be considered and captured. The Vendor shall notify the Commission based upon notice and escalation procedures as approved by the Commission.

- 6. At the direction of the Commission, the CMS shall be able to immediately start or cease gaming functions by disabling or enabling any individual EGD, any group of EGDs, or all EGDs. The Vendor shall provide for a process of executing a shutdown command from the CMS that causes EGDs to cease functioning and a process of executing a startup command from the CMS. Both automatic and manual shutdown capabilities shall be available from the Central System. The Central System shall have the functionality to disable and enable EGDs at an EGD Facility and system wide with a single command for each type.
- 7. When communication between the CMS and an EGD is disrupted, the components shall automatically resume processing as soon as communication is restored without any loss of data.
- 8. The CMS shall provide a warning for each EGD when polled meters are outside of expected parameters. This will allow the Vendor and the Facility to proactively react to inaccurate or suspected inaccurate meter readings. The CMS shall provide the setting and monitoring of thresholds that provide an alert to the Commission in the event any and all meters fall outside of the established threshold values.
- 9. The CMS shall provide a single point of entry for all management functions from secure browsers on the Commission's Wide Area Network (WAN) or Virtual Private Network (VPN).
- 10. The Central System shall be capable of accepting and processing adjustments to include specification of a dollar amount and explanation for the adjustment. Posting of adjustments shall be allowed from either Management Terminals and from computer files supplied by the Commission. The CMS shall provide a single screen for meter adjustments which will allow all adjustments to key meters to be made on a single screen.
- 11. The CMS shall provide the capability for EGDs to operate for up to seventy-two (72) hours without connection to the CMS, with all data being collected and stored without loss by the site controllers.
- 12. The functions of the CMS shall not be obtrusive for the players, for employees who require real-time monitoring of security events, financial transactions, or service of the EGDs. Performance of the CMS shall not degrade noticeably during normal functionality. In addition, the CMS shall provide capacity to accommodate EGD populations, play volumes, and event recording consistent with all specifications.

13. Time Synchronizing:

- a. Multiple systems in the configuration, such as a clustering of processors, shall have a time synchronizing mechanism to ensure consistent time recording and reporting for events and transactions.
- b. The Primary and Back-up System shall be time-synchronized, to ensure that both Systems have all transaction data at all times.
- c. Synchronization with an external time standard shall be provided.
- d. The Primary and Back-up System shall be fault tolerant and able to fail over immediately in the case of a primary failure.

5.2.5 POWER-UP AND POWER FAILURE RECOVERY

During a CMS power-up or power recovery the Vendor shall monitor the CMS and all EGDs to ensure the proper response and functioning of all EGDs. The Vendor shall respond to any CMS reauthorization request within five (5) minutes. The Vendor shall establish a manual intervention process for corrective action for any EGD that does not respond or fails to function properly, including communications and coordination with the Facility.

5.2.6 HARDWARE

- **5.2.6.1** The Vendor shall obtain prior approval in writing from the Commission before making any enhancement or modification to the hardware configuration or procedures.
- **5.2.6.2** All hardware and ancillary peripherals making up the CMS shall be new equipment that has not previously been used or refurbished.
- **5.2.6.3** The Vendor will build the cost of a full refresh of the hardware / operating system and virtualization platform refresh every 5 years.

5.2.7 SOFTWARE

5.2.7.1 Unauthorized Changes to Software

The Vendor shall obtain prior approval in writing from the Commission before making any enhancement or modification to the operating software, configuration or procedures. The Vendor shall run a software utility on a daily basis that checks to ensure software libraries have not been modified in order to prevent unexpected and non-approved software changes. The System shall automatically generate and send daily in electronic form to the Commission a report of the results of the software utility check.

5.2.7.2 Software – Version Maintenance for MGC Operations

The Vendor will maintain the most current version of their CMS application running on the Commissions platform. Major version upgrades must be operational at MGC within 6 months of their release to general availability.

5.2.7.3 Software Licenses and Escrow

All software installed by the Vendor, as well as any maintenance or enhancements to that software, and all program documentation supplied by the Vendor for the duration of the Contract, shall be licensed to the Commission for the duration of the Contract and any extensions at no additional cost. The Vendor shall provide to the Commission, or place in escrow with an escrow agent located in the State, in a form acceptable to the Commission, up to date copies of all software source code and related documentation developed (or modified) by the Vendor, to operate the System and games. The purpose is to provide the Commission access to and use of the software source code for auditing or continued operations should the Vendor suffer any condition such that it could not continue operations. If the Vendor supplies existing software for which the Vendor or others have copyright/ownership rights, the Vendor shall either provide the source code directly to the Commission, in a form acceptable to the Commission, or shall place the source code in escrow with an escrow agent located in the State. Two copies of all source code shall be provided in a format approved by the Commission. The Vendor shall require the escrow agent to provide written notification to the Commission upon receipt of the source code.

5.2.7.3 Protocol Simulation

1. The Vendor shall furnish specifications, protocols and formats of messages to/from the CMS. This also includes communication between CMS devices.

2. Protocol Simulator

- a. The simulator shall adequately support and exercise all of the transactions and message types that are to be used by the communications protocol.
- b. The simulator shall be capable of generating common communication errors to confirm that the EGD software is properly handling the event (i.e., malformed messages, no acknowledgement, incorrect cyclic redundancy checking ("CRC"), incorrect data, etc.).
- c. The simulator shall provide for performance/volume testing.
- d. An operations manual or other suitable documentation shall be supplied with the simulator.
- e. The simulator shall run on standard, freely available equipment such as a PC or the equivalent. Alternatively, the supplier may loan suitable simulator hardware to all approved users.

5.2.7.4 Software Validation

- 1. The CMS shall initiate a signature validation command whenever any EGD is enrolled.
- 2. If an EGD fails the signature validation test, it shall not be possible to enable that EGD into normal mode without manual intervention at the CMS level. A System generated report for both validated and failed EGDs shall be submitted daily to the Commission.
- 3. One (1) of the following two (2) methods of signature check reference storage must be implemented:
 - a. Game software image storage: All game software images that exist in the EGD shall also be stored in the CMS. The game software images stored in the CMS are used for signature calculations and are subsequently used to validate the signature calculation results reported from the EGD.
 - b. Pre-calculated signature results storage: The table of signature results shall have at a minimum of ten (10) entries. These entries shall be generated from randomly selected seed values for each game and repopulated on a daily basis. The utility program used to generate the signature check result table shall be approved by the Commission.
- 4. Both the game software image and pre-calculated signature results are sensitive data files that shall have appropriate security such as password protection and file encryption.
- 5. If the image used for validating the EGD software is comprised of more than one program or device (for example, a EGD may have one main program and one game program) the Central System shall have the functionality to allow the operator to load each component individually and the Central System shall combine the individual images based upon the scheme supplied by the EGD manufacturer to create the combined image.

5.2.8 ACCOUNTING REQUIREMENTS

- **5.2.8.1** The CMS shall monitor the operation of each EGD and create reports using, at minimum, the following information:
 - 1. Number of cents wagered;
 - 2. Number of cents won;
 - 3. Number of cents paid out by a printed ticket;
 - 4. Number of cents accepted via a printed ticket;

- 5. Number of cents accepted via bill, ticket or other instrument of value;
- 6. Number of cents transferred to the EGD electronically;
- 7. Number of cents transferred from the EGD electronically;
- 8. Number of cents paid out via hand pay or canceled credit;
- 9. Number of cents paid out via jackpot;
- 10. Number of cumulative credits representing money inserted by a player;
- 11. Number of cents on the credit meter;
- 12. Number of games played;
- 13. Number of games won;
- 14. Number of times the logic area was accessed;
- 15. Number of times the cash door was accessed;
- 16. Each person who accessed the logic area and the date and time it was accessed;
- 17. Each person who accessed the cash door and the date and time it was accessed;
- 18. The number of all promotional credits (Cashable and non-cashable) received at the game;
- 19. The value of all promotional credits (Cashable and non-cashable) received at the game;
- 20. The number of all promotional credits (Cashable and non-cashable) sent from the game;
- 21. The value of all promotional credits (Cashable and non-cashable) sent from the game; and
- 22. The number and value of other electronic credits including, but not limited to, Debit Cards, Gift Cards and Smart Cards.
- **5.2.8.2** The CMS shall receive all meter-reading data in near real time in an on-line, automated fashion. At a minimum, the CMS shall poll all EGDs on an hourly basis. Manual reading of meter values may not be substituted for automated requirements.
- **5.2.8.3** The CMS shall acquire and report the EGD game meters and not an external or CMS meter incrementation process. The CMS shall read and report using the full set of actual EGD meters.
- **5.2.8.4** The CMS shall be able to process all EGD game meter sizes and record lengths with scalability for future growth or enhancement.
- **5.2.8.5** Support for Promotional Credits

The Central System shall provide a breakout of promotional credits by EGD Facility, which shall include both cashable and non-cashable promotional credits. In addition, the Commission may establish a threshold of non-taxable promotional credits on an annual basis. The CMS shall report on the status of promotional credits within that threshold. In the event the threshold is surpassed the CMS shall continue to breakout the promotional credits but include the credits over the percentage as taxable win.

5.2.8.6 The CMS vendor shall be required to provide a daily report to the Commission that does a side-by-side-by-side comparison to the CMS meter reads, the operator meter reads, and the actual cash count for each EGD and game operating on an EGD.

5.2.9 LOCAL AND WIDE AREA PROGRESSIVE EGDS

- **5.2.9.1** The CMS shall be able to report progressive jackpot games, either stand —alone or linked games, at a single or multiple facilities. The CMS should also have the ability to include reporting for progressive jackpot games linked to multi-state licensed facilities.
- **5.2.9.2** The CMS shall produce reports that clearly demonstrate the method used to arrive at the jackpot amount. This includes the documentation of credits contributed from the beginning of the polling cycle (including those from the time period immediately following the previous jackpot) and all credits contributed up to and including the polling cycle that includes the jackpot signal. Credits contributed to the system after the jackpot win occurs, in real-time but during the same polling cycle, shall be considered to have been contributed to the progressive jackpot amount prior to the win.
- **5.2.9.3** The CMS shall produce fiscal reports that support and verify the economic activity of the game(s), indicating the amount of and basis for, the current jackpot amount (the amount currently in play). Such reports shall include but not be limited to:
- 1. An aggregate report to show only the balancing of the progressive link with regard to Facility-wide totals;
- 2. A detail report in a format that indicates for each EGD, summarized by location, the cash-in/cash out and credits-played/credits-won totals, as such terms are commonly understood in the industry.
- **5.2.9.4** Each progressive controller linking one or more progressive EGDs shall be submitted to be evaluated by the Commission's certified independent testing laboratory, and be approved by the Commission.

- **5.2.9.5** There shall be a progressive entry authorization log within each controller and the log shall be completed by any person gaining entrance to the controller. The log shall be entered on a form provided by the Commission to provide an audit trail of any employee who gains access to the progressive controller.
- **5.2.9.6** A progressive meter or progressive controller shall keep the following information in nonvolatile memory which shall be displayed to the Commission or Facility upon demand:
- 1. Number of progressive jackpots won on each progressive meter if the progressive display has more than one winning amount.
- 2. Cumulative amounts paid on each progressive meter if the progressive display has more than one winning amount.
- 3. Maximum amount of the progressive payout for each meter displayed.
- 4. Minimum amount or reset amount of the progressive payout for each meter displayed.
- 5. Rate of progression for each meter.

5.2.10 ASSET TRACKING

- **5.2.10.1** The Vendor shall provide state-wide asset management for all EGDs, including asset tracking, hardware status, location, maintenance history, inventory status, spare parts and whether the EGD is Operator owned or leased. The asset management system shall include the following fields: State identification number, serial number, Location Asset Number, location, EGD Manufacturer name, MGC permit issue date, game name, location and last physical inventory date. The Vendor shall provide designated Commission employees with secure, internet browser based, update and report capability to the asset tracking system.
- **5.2.10.2** The Vendor shall provide the ability for the Commission to track all EGDs statewide, including both EGDs that are operational on a EGD Facility floor and EGDs that are not currently active. This means each EGD shall be tagged and tracked based on an overall designation (Serial number, individual asset number) for the entire life of the EGD while within the Commonwealth.
- **5.2.10.3** Asset Tracking must be integrated with the CMS.

5.2.11 REPORTING

5.2.11.1 General Requirements

All data shall be extractable / exportable to such tools as Excel, Access, text format, etc. All reports shall be exportable with and without headings in CSV format and shall be printable in PDF format.

- 1. The Central System shall provide a chronological report of any or all transactions by date, time, transaction type, Facility number, transaction number and any other sort option as required by the Commission.
- 2. The CMS shall provide two types of reporting tools: Regularly Scheduled Reports and Ad Hoc Reporting capability. The Vendor shall create new standard scheduled reports and Ad Hoc reports, within agreed upon schedules, throughout the term of the Contract as required by the Commission.
- 3. The Commission requires maximum flexibility in utilizing the information that is contained on the System.
 - a. The Commission requires that the Vendor maintain an application data model (such as a relational database) specifically for the Commission containing data elements and relationships to be agreed upon by the Commission and the Vendor.
 - b. Data items shall be made current in real time or as close to real-time as possible.
 - c. Database information shall include all information collected by the System.
 - d. Commission System users shall be able to, using the relational database architecture, develop, modify, save and schedule individual reports.
 - e. All information retrieved from the relational database architecture in userdeveloped reports shall be able to be indexed and sorted.
- 4. The System shall provide the ability for management users to inquire into a history for a specified range of dates. The information provided in response to such an inquiry shall detail all financial activity for the selected time period. The ability to select specific transaction types for a time period is also required.

5.2.11.2 Types of Reports

- 1. CMS Daily Report Requests Pre-designed reports requested by the Commission from the CMS shall be accurate and readily available to be generated by the Commission on demand. These reports shall include, but not be limited to, the following general types of reports which shall be based upon criteria and format as approved by the Commission:
 - a. Performance Reports
 - b. Financial Summary Reports
 - c. Transaction Reports
 - d. System Audit Reports
 - e. Error and Alert Reports
 - f. Ad hoc Query and On-Demand Reports

2. Summary of Required Reports

- 1. **Software Utility Check** Provides the validation status of game authorization during the startup, normal operation and shutdown of each EGD. (daily Section 5.2.7.1)
- 2. **Signature Validation -** A CMS generated report indicating both validated EGDs and EGDs that failed the signature validation test. (daily Section 5.2.7.4 (2))
- 3. **Non-Reporting EGDs (due to non-communications)** A report by Facility, by EGD Manufacturer's EGD that summarizes the last polled date, by EGD Manufacturer and serial number, reason for error, and poll address.
- 4. **Non-Reporting EGDs** (communicating but no data reported) A report by Facility, by EGD Manufacturer's EGD that summarizes the last polled date, by EGD Manufacturer and serial number, reason for error, and poll address.
- 5. **Accounting Detail** Provide detailed accounting data by EGD (daily Section 5.2.8.1)
- 6. **Financial Summary Report** A report by EGD Manufacturer's that summarizes by date the amount played, amount won, net revenue, jackpots paid, number of EGDs, and average net revenue by EGD.

- 7. **Prize Payout Report** Calculates the prize payout percentage of each game on the basis of cents won divided by cents played.
- 8. **Facility Report** Contains the following information:
 - a. Facility License Number
 - b. Facility Name
 - c. Facility License Number
 - d. Facility Address
 - e. Machine Serial Number
 - f. MGC/Location Asset number
 - g. Cents Played
 - h. Cents Won
- 9. **Transaction Report -** A report by Facility, EGD Manufacturer and serial number that summarizes the cash in, cash out, net revenue, amount played, amount won, progressive jackpot contribution, win frequency, payback percentage, net jackpot won, games played and games won.
- 10. **Game Preference Reports** Provides game play statistics by trait type, string, by EGD Manufacturer, or other parameters approved by the Commission.
- 11. **Hourly Game Play Report -** Tracks hourly game play data. The report lists the number of EGDs actively reporting, cash in amount, cash won amount, average cash played amount per terminal and validations.
- 12. **Accounting/Promotional Credits** Provides a breakdown of all gaming and promotional credits meters in relation to the each EGD meters and overall usage by EGD Manufacturer, serial number, or other parameters approved by the Commission. (daily Section 5.2.8.5)
- 13. **Progressive EGDs** Provides a breakdown of game, local and wide area progressive meters and jackpots. In addition, it will report the reinvestment (escrow) and payment values. (daily Section 5.2.9.2)

- 14. **Asset Tracking Report** Provides a status by EGD of key asset management parameters (as required Section 5.2.10):
 - a. Serial Number
 - b. Order, Shipment and Delivery Date
 - c. Current Location (Manufacturer, Shipped, Facility, Warehouse...)
 - d. EGD Installation Date
 - e. Hardware replacements f. Hardware upgrades
 - g. Ticket Printer

Manufacturer

- h. Bill Acceptor Manufacturer
- i. Service Dates
- 15. **CMS Failover Testing -** Vendor shall conduct Failover testing twice a year and report all results of the testing to the Commission within five (5) days (twice per
- report all results of the testing to the Commission within five (5) days. (twice per year Section 5.6.2)
- 16. **Security/User Access Report** Provides detailed audit trail of all user access at all levels including, but not limited to, applications, data and system level access. (bi-weekly Section 5.7.6)
- 17. **Security Violation Report** Provides all alerts and violations to the CMS for both external events (facility violations) or internal events (CMS access or events). (as required Section 5.7.7.2)
- 18. **Security Update Report** Provides all changes (adds, deletes and changes) to the CMS security schema, including new users, authorization levels, application and data access and CMS configuration changes. (within 7 days of an event Section 5.6.7.1 (5))
- 19. **Daily Sweep Invoice** Creates an invoice to be sent to each Facility stating the amount of tax liability for EGD operations at the end of each gaming day.
- 20. **Hotline Report** Provides information regarding service calls, dispatches and resolutions. (weekly Section 5.10.1 (5))

5.2.12 OFF-SITE DATA STORAGE REQUIREMENTS

The Vendor shall keep back-up copies of all software and data required to support a full CMS recovery without loss or corruption of data by maintaining said information in a secure location remote from either the Primary Site or Back-up Site. Data transport shall be via secure and reliable methods (electronically where feasible) and all back-up data, at rest or in transit, shall be encrypted or otherwise secure from unauthorized access. Secure system to system data transport for backup is

preferred over physical media that must be transported. A complete audit trail of the generation, transport, retention and destruction of the back-up data shall be maintained and shall be available for review by the Commission.

5.2.13 TRANSACTION INQUIRY

The Vendor shall provide to the Commission the ability to research transaction history files (search and view all transaction data) to verify the existence of any and all transactions. The purpose is to answer customer questions, to investigate fraud allegations, to gather information for presentation to courts as evidence, and similar such actions. The CMS shall provide the ability to search in real time and view all transaction data.

5.3 NETWORK AND OPERATIONS MONITORING

The Vendor shall provide a separate industry standard Network Monitoring System which shall be directly accessible in real time by the Commission. This system shall provide a single screen graphical display of the status of all WAN and LAN equipment on the network. Communications test and monitor capability shall be available at both the Primary and Back-up Sites. Network monitoring tools shall be able to interface and analyze protocols, view transaction data for performance and capacity analysis, and create visual and/or audible alarms to provide warning of problems. The capability shall be included to determine whether failure has occurred in the equipment at the Primary or Back-up Site, within the wide area communications network or at the Facilities down to the EGD level.

The Vendor shall provide to the Commission a real time display of network and equipment status, which will provide view and report capabilities. The system shall advise the Commission of any Facility where service has been disrupted and shall attempt to determine whether the equipment is at fault or the Telecommunication Network is responsible for the service disruption. The System shall display the down time of any and all equipment and/or telecommunications circuit in the network over a period of time selectable by the operator or as specified by the Commission.

The Vendor shall be responsible for network monitoring and management. The Vendor's network administrative services shall include configuration processes, including escalation procedures.

5.4 PRIMARY AND BACK-UP SITE REQUIREMENTS

5.4.1 PRIMARY NETWORK OPERATIONS CENTER and TESTING LAB

The Vendor shall operate a Primary Network Operations Center (NOC) and Testing Lab, including but not limited equipment and staff (24x7x365) which shall be used exclusively to support the Commission's Contract and shall be co-located in the Commission's new headquarters building at 101 Federal Street, Boston, MA 02019.

The design and layout of this Primary Site shall be pre-approved by the Commission. The lab shall not be identified externally or internally as being the premises of the Vendor. At minimum, the following shall be included in this Site:

The Vendor shall operate a Primary Site including but not limited equipment and staff (24x7x365) which shall be used exclusively to support the Commission's Contract and shall be co-located in the Commission's new headquarters building at 101 Federal Street, Boston, MA 02019.

The design and layout of this Primary Site shall be pre-approved by the Commission. The lab shall not be identified externally or internally as being the premises of the Vendor. At minimum, the following shall be included in this Site:

1. Dedicated Interoperability and Testing Lab: The Vendor shall work with the Commission to outfit dedicated space with adequate room to house its test system, EGDs from multiple manufacturers, printers and reports, and other equipment the Commission requires to be tested.

The Testing Lab shall be designed to allow staff to conduct testing in a comfortable, user- friendly environment.

- 2. The Vendor shall provide the Testing Lab with its own independent system that is a complete set of computer systems and software consisting of the exact duplicate configuration of the Primary System and have all combinations of equipment and system capabilities including all communication channels to allow any and all testing of CMS and related hardware and software. The Vendor shall provide a test environment for the EGDs, including controllers (or technical equivalent approved by the Commission) and Central Control System emulation for EGDs provided by each of the approved EGD manufacturers.
- 3. The layout and design of the Testing Lab shall be approved by the Commission.
- 4. The Testing Lab shall be available at all times to Commission personnel.

- 5. As operational configurations, processes or devices change or upgrade, the testing and development systems shall mirror those changes.
- 6. The physical area shall comply with all State and local building codes, laws and rules for facilities of its type. The Vendor shall obtain proper permits and inspections.
- 7. Vendor shall supply electrical and network connections sufficient to support all equipment to be tested. The Testing Lab shall have a separate climate control.
- 8. The Vendor shall supply all Central System supported equipment required for testing to include hardware and/or software.
- 9. The Testing Lab shall be a secured area with limited access and shall be under video surveillance at all times with live signal feed to the Commission.

5.4.2 BACK-UP SITE

The Vendor shall provide and operate a fully redundant hot Back-up Site including but not limited to facilities, equipment and staff (24x7x365) which shall be located in a different power substation and LATA than the Primary Site and at least twenty five (25) miles from the Primary Site. The Back-up Site may not reside outside of the State and may, with the Commission's prior approval, be located at a shared site with other business of the Vendor provided it is a separate secured video monitored area with live signal feed to the Commission's headquarters.

A hot Back-up Site is defined as operating a system which receives a mirror image

of all transactions on a real-time basis from the active system with the capability to automatically take over processing in the event of a failure at the Primary Site with minimal service disruption to the System and with no loss or corruption of data. The Vendor shall employ a minimum of two computer systems, (i.e. a Master System and a Duplex System) with no shared peripherals, at the Back-up Site.

- **5.4.2.1** The Back-up system(s) shall be of the same processing capacity and architecture as the Primary Site system(s).
- **5.4.2.2** The latest technology Redundant Array of Independent Disk ("RAID") shall be used to protect key data at the Back-up Site. Data transferred to and recorded at the Back-up Site shall always

contain all most recent transactions, allowing a rapid Failover. The Commission and EGD Facility networks must be routed so as to permit transaction processing at the Back-up Site. Other communications to permit Commission operations must also connect to the Back-up Site. The Wide Area Network shall have a routing mechanism independent of the Primary Site so that the Back-up Site can be reached without the Primary Site.

- **5.4.2.3** The Vendor shall provide a Back-up Site, which contains sufficient hardware to support the same requirements stated for the Primary Site with no single point of failure. The Back-up Site shall contain the capability to perform all functions associated with EGDs, as well as being available remotely by communications from the Primary Site. The Back-up System shall have the same security specification as the Primary System.
- **5.4.2.4** The operational procedures for failure, transferring control to the Back-up Site and recovery shall be clear and concise. The Vendor shall provide and maintain an up to date disaster recovery plan with scheduled test dates included. The Commission shall have the right to review and approve all of the Vendor's procedures.
- **5.4.2.5** Any access including dial-back systems shall be capable of logging remote logins. These logins shall be provided to the Commission upon request for audit purposes.
- **5.4.2.6** All Vendor's hardware and software, both Primary and Back-up Systems, shall be designed and operate such that there is no possible corruption of data or loss of transaction integrity.
- **5.4.2.7** The Vendor shall include in the Back-up Site selection criteria consideration of the sensitivity to potential adverse conditions such as earthquake, flood or local communications failure. At a minimum, the following shall be included in this Site:
 - 1. Design layout shall be approved by the Commission. This space shall fall under the same fire protection and back- up power requirements as the computer room itself.
 - 2. The Vendor shall supply cleaning services and pay for all utilities and services for this entire Site.

5.4.3 FIRE PROTECTION AND STRUCTURAL REQUIREMENTS

Both Primary and Back-up Sites shall meet the following minimum structural requirements:

- 1. Computer rooms and telecommunication rooms shall be separated from other areas by non-combustible construction having at least a two (2) hour fire resistance.
- 2. Walls shall be extended from structural floor to structural floor (or roof) above.
- 3. Fire doors shall be provided on all entrances into the computer room with a fire resistance rating at least equal to the wall in which the door is located.
- 4. Fire and smoke dampers shall be provided in ducts that pass through the computer room walls, floor or ceiling.
- 5. The physical area shall comply with all state and local building codes, laws and rules for facilities of its type. The Vendor shall obtain proper permits and inspections.
- 6. The physical facility shall be constructed in accordance with the standards specified in the current edition of National Fire Protection Association (NFPA) publication No.75, "Protection of Electronic Computing/Data Processing Equipment."
- 7. The Vendor shall install and maintain in good operating condition fire detection, fire suppression, and automatic fire extinguishing systems of sufficient capacities to protect the computer rooms based on FM-200 or another Commission approved method. These systems shall be installed and maintained as specified by applicable National Fire Protection Association (NFPA) and State Fire Marshal Standards. Any under floor areas shall also be protected by the automatic extinguishing systems.
- 8. An air conditioning failure detection mechanism shall be provided. The environmental controls (air conditioning system(s)) shall be interlocked to shut down upon activation of the fire extinguishing system or the automatic fire extinguishing system shall be installed with sufficient capacity to compensate for loss of extinguishing system through operation of the air conditioning systems.
- 9. All penetrations through the computer room(s), wall(s) or ceiling(s) shall be sealed tightly with material equivalent to existing floor, wall or ceiling construction to prevent passage of heat, smoke and water.
- 10. There shall be a water detection system covering all under floor areas of computer and media storage areas.
- 11. Fire proof storage for back-up media shall be able to withstand a minimum two (2) hour fire with no damage to the stored media.

5.4.4 POWER AND POWER BACK-UP EQUIPMENT

Both Primary and Back-up Sites shall comply, at minimum, with the following requirements:

- 1. The Vendor shall provide and maintain in good operating condition, an uninterruptible power supply with batteries and electrical generating capabilities of, at a minimum, one hundred fifty (150) percent of the capacity needed to sustain all hardware, environments, equipment, communications equipment and necessary lighting to conduct full capacity business until primary power is restored if a failure occur.
- 2. If a raised floor is not used in computer areas then the Vendor shall ensure that the designs and procedures utilized provide protection against electrical shocks and accidents.

5.5 WIDE AREA NETWORK

All wiring shall have disparate paths into the building with separate points of entry, disparate paths inside the building into the site controller closets, and redundancy inside the closets.

5.5.1 OUTSIDE WIRE

All outside telecommunications circuits shall follow disparate paths from both the CMS Primary and Backup Sites to the separate disparate entry points at each Facility.

5.5.2 INSIDE WIRE

All inside wiring at each Facility shall follow disparate paths from the central computer room to the site controller closets and have redundancy within these closets.

Wiring within each Facility shall be a minimum of CAT6 cabling.

5.6 DISASTER RECOVERY

5.6.1 Disaster Recovery Plan

The Vendor shall develop an operational recovery and business continuity plan and provide it to the Commission for approval no later than forty-five (45) calendar days from Contract execution date. The plan shall be updated at least annually for the Commission's approval to ensure minimal interruption to service in case of an emergency, and shall include, but not be limited to, the following sections:

- a. Business Impact Analysis
- b. Risk, Threat and Vulnerability Analysis
- c. Recovery Strategy
- d. Emergency Response
- e. Problem Escalation
- f. Plan Activation
- g. Recovery Operations
- h. Plan Validation, Testing and Maintenance schedules
- i. Key personnel contact list to include Commission personnel

5.6.2 CMS Failover Testing and Demonstration

- 1. As directed by the Commission, the Vendor shall execute controlled Failover tests twice per year in coordination with the Commission and each EGD Facility. Failover tests shall focus on three key redundancy areas: Primary to Back-up Site; Dual Points of Entry; and Dual paths to the CMS Wiring Closet. Vendor shall submit its test plan to the Commission for approval at least (30) days prior to the test.
- 2. A remote method to monitor equipment at the Back-up Site shall be provided. The Vendor shall demonstrate that the Back-up Site is fully functional by operating in production from the Back-up Site at least twice
 - a year for at least 24 hours a day as directed by the Commission. The Primary Site shall serve as the hot Back-up in this scenario.
- 3. The Vendor shall conduct operational recovery and business continuity (Disaster Recovery) testing/exercises twice a year, to include full performance and end RFR Central Monitoring System MGC-CMS-2015

to end testing of all business processes and procedures, CMS and component functionality. The Commission shall be allowed to observe the testing/exercises. All results of the exercises shall be reported in writing to the Commission within five (5) days.

- 4. The Vendor shall participate in the Commission's operational recovery and business continuity exercises twice per year.
- 5. The Vendor shall correct and retest any deficiencies discovered by audit findings or operational recovery testing within ten (10) days.
- 6. The Vendor shall automatically permit all gaming traffic to flow to the appropriate Network Host Center when the Back-up Site is invoked.

5.6.3 Destruction of Site

In the event of irreparable damage at the Primary or Back-up Site or of an unplanned, extended abandonment of the Site, the Vendor shall provide at no additional cost to the State those host processors, facilities, and other components necessary to resume EGD sales under a two-Site operational scenario. Such host processors, facilities, and other components shall be furnished, installed and operational within thirty (30) days after the Commission declaring a disaster. Until a permanent Primary or Back-up Site can be re-established, substitute Sites shall meet Commission-approved environmental and security measures as specified herein for the Primary and Back-up Sites.

5.7 SECURITY

The Commission is concerned that a third party might eavesdrop on a circuit and gain access to data that might compromise the integrity of the CMS. The CMS shall provide encryption techniques that shall eliminate and discourage attempts of this type. The Commission is also concerned that individuals may attempt to disrupt the service by tampering with the Wide Area Network in a way that will not compromise the data but will interfere with the ability of the Network to transmit data in a timely manner. The Network shall be made highly secure, and shall be designed to protect against a disruption of service and corruption of data. The network shall be continuously monitored and any significant outages reported to the Commission immediately – not to exceed one hour elapsed time.

5.7.1 SECURITY PLAN

The Vendor shall submit an infrastructure and data security plan to the Commission for approval no later than ninety (90) days prior to commencement of CMS operations. The plan must be maintained RFR Central Monitoring System MGC-CMS-2015

and submitted annually for review and approval by the Commission. The plan should employ best practices (i.e. NIST SP 800-53 or ISO/IEC 27001) for protecting infrastructure and data. The Vendor will also be aware of the Commonwealth of Massachusetts Information Technology Security Policy and Standards.

Reference Material - the most current versions of relevant materials are available at:

 $\underline{\text{http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/}.$

http://www.iso.org/iso/home/standards/management-standards/iso27001.htm

http://csrc.nist.gov/publications/nistpubs/800-53-rev4/sp800-53r4_summary.pdf

At a minimum, the Vendor shall review the Security Plan annually, update as necessary and submit to the Commission for approval. The Plan shall include the following sections:

- a. Business Impact Analysis
- b. Risks, Threat and Vulnerability Analysis
- c. Security Strategy
- d. Personnel Security Practices
- e. Physical Security
- f. Data Security
- g. Telecommunications (VPN, WAN, LAN) Operational and Physical Security
- h. Telecommunications (VPN, WAN, LAN) Access Security
- i. Protection of Software and Other Copyrighted Material
- j. Plan Evaluation
- k. Security Awareness/Training
- 1. Plan Maintenance

5.7.2 PHYSICAL SECURITY

- **5.7.2.1** The purpose of the physical security component of the security program is to reduce the risk of data compromise due to physical break-ins or unauthorized access to equipment and data. The Vendor shall ensure that adequate protective measures are implemented for all computing resources.
- **5.7.2.2** All Vendor's offices, the Primary and Back-up Sites, and secure areas at the EGD Facilities shall be secured twenty four (24) hours per day so that only authorized persons designated by the Commission are permitted to gain entry into the sites and that such persons are restricted to authorized areas.
- **5.7.2.3** Access control requirements at the Primary and Back-up Sites and secure areas at EGD Facilities shall include, but not be limited to:
- 1. The placement of computer room walls and windows shall limit access by unauthorized individuals.
- 2. The general structure of interior walls shall be secured and constructed from the floor to the true, not false, ceiling.
- 3. The computer room and each Central System wiring closet shall have secured access (i.e., proxy card, keypad, or keyed lock).
- 4. The computer room and entrance to each CMS wiring closet shall have PTZ (point, click, zoom) surveillance camera coverage.
- 5. The Vendor shall provide a log of all visitor access into the computer room and each wiring closet. All non CMS related access shall be requested in writing and approved in advance by the Commission.
- 6. Site entry and control points shall be guarded.
- All key access doors shall be self-closing and self-locking with card reader access. Access history data shall be maintained for a minimum of 90 days.
- 8. Recording-type closed circuit television shall monitor all vulnerable and sensitive areas. The video monitoring system must have a time/date generator that appears on all recordings. The Vendor shall provide video monitoring systems, backup and recovery for the computer rooms at the Primary and Back-up Sites and for all secure areas at the Facilities so activities can be monitored and recorded

(DVD or other digital on-line media, or server based) for security purposes remotely from the Commission's headquarters. B a c k u p m edia (DVD, etc.) shall be kept for a minimum of one (1) month.

- 9. All visitors and messengers shall be logged in and out of the secure areas and all visitors shall be escorted at all times while inside. Logs shall be kept for the life of the Contract and shall identify who allowed the access. In addition to the date and time, the purpose of the visit must also be reported.
- 10. Access authority shall be removed immediately upon change of assignment or termination.
- 11. A complete listing generated by the CMS of the Vendor's staff and access levels shall be furnished to the Commission monthly.
- 12. The Vendor shall keep a current listing and/or memorandum authorizing access to Commission or other State staff and their access levels to the secure areas. Sensitive areas shall include, at a minimum, host systems and the communications equipment/workstations used to access host systems.
- 13. All Vendor employees shall receive, use and be easily recognized by a photo identification badge that has been approved by the Commission.
- 14. The Commission shall approve the user access list.
- 15. The Vendor shall use positive identification using pass, key lock, badge system, cipher lock or other controls for employees, suppliers and visitors to access the computer room.
- 16. The Vendor shall establish a control system to ensure identification of the individuals having possession of the keys, cards and badges at any given time. The key, card, and badge inventory must be kept current at all times.
- 17. The Vendor shall, at a minimum, on a monthly basis review the list of assigned key cards or access rights and ensures that all persons on the list are still authorized employees.
- 18. The Vendor shall use logs or special badges for visitors to the computer room.
- 19. The Vendor shall control the computer room access of maintenance and other personnel.
- 20. Vendor shall install and maintain Physical Intrusion Detection Devices at all entrances/exits at its secure areas, which shall be operational 24x7x365/366. Vendor must notify the Commission immediately of any unauthorized access or intrusion.

- 21. Vendor shall notify the Commission at least 72 hours in advance of any planned visitor being granted access to any Vendor secured areas at any Facility.
- **5.7.2.4** At any time, personnel authorized by the Commission may inspect all premises of the Vendor or its sub-Vendors involved in the Contract to determine the degree of security and operational compliance. In addition, authorized Commission personnel or other party designated by the Commission shall also have access to interview any Vendor or sub-Vendor employee or authorized agent in conjunction with any audit, review or investigation deemed necessary by the Commission.

5.7.3 CMS SECURITY

- **5.7.3.1** User account files shall not be in plain text format and shall be encrypted. The CMS shall write to a log file and report on all successful and unsuccessful sign on and log off attempts made to the CMS. The CMS shall have the following security features:
- 1. It shall capture the user ID, user name, sign-on date/time and indicator that signify a successful / unsuccessful sign-on.
- 2. It shall log and report all changes to the CMS by all users logged on to the CMS (including administrators).
- 3. All security log files shall be directly accessible by the Commission on a daily basis.
- 4. It shall lock out all users after three (3) unsuccessful log-on attempts.
- 5. It shall have the ability to assign users to groups and must have the ability to assign privileges to each group.
- 6. It shall expire a user's password at forty-five (45) days. Once an administrator has reset a user's password, the CMS shall force the user to change his/her password upon the next login. Password expiration shall comply with Commission and Commonwealth Data Security Policies. http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/
- **5.7.3.2** The Vendor shall comply with all of the Commission and State Security and Access Policies for both physical security and data security. http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/

- **5.7.3.3** All components of the CMS shall meet or exceed the ISO 15408 Common Criteria for Information Technology Security http://www.iso.org/iso/home/standards/management-standards/iso27001.htm http://csrc.nist.gov/cc/.
- **5.7.3.4** The Vendor's System Administrator shall have the ability to deactivate / archive users from the system.

5.7.3.5 Secure Connections

- 1. There shall be no connectivity to the Central System from outside the CMS network without prior Commission approval.
- 2. Any such capability, such as for remote monitoring or diagnosis of equipment or software, shall employ stringent security mechanisms such as message encryption, logging of sessions, Secure Tokens, etc.
- 3. Connections to other remote systems and terminals shall be protected by firewalls, encryption, secure shell (SSH), Virtual Private Network (VPN) or other means. Any routers shall route traffic only to addresses defined in their routing tables as valid.
- 4. The acceptability of any such security approach will be subject to Commission preapproval.

5.7.4 DATA SECURITY

- 1. After the Commission has accepted the Central System in writing, the Vendor shall be prohibited from modifying the software or databases of the CMS without the prior written approval of the Commission.
- 2. The Commission shall have the right to require at any time such further and additional security measures as deemed necessary or appropriate to ensure the integrity of the CMS or the game(s).
- 3. Only persons authorized by the Commission may access:

- a. Sensitive or confidential data
- b. Software programs and CMS documentation
- c. Computer rooms
- d. Disk, tape, and other media (DVD, CD) libraries and vaults
- e. Any other area deemed by the Commission to warrant such authorization
- 4. Data that is determined to be sensitive enough to warrant encryption while in storage shall be encrypted using a encryption level no less than 128bit Triple DES, also referred to as Triple Data Encryption Algorithm (TDEA) in NIST SP 800-67, or 3DES by cryptographers and security application vendors.
- 5. The Data Security Plan shall follow Commission-approved documentation standards and be available in hard copy and data format.
 - a. Shared user accounts shall not be permitted.
 - b. The applications and servers requiring authentication shall support the ability to enforce complex passwords, minimum life of password, maximum life of password and minimum iterations of passwords.
 - c. The Vendor shall develop, document and implement a security program component that is appropriate for the level of sensitivity/confidentiality of the information being processed. The purpose of the data security component of the IT security program is to reduce the risk associated with the compromise or destruction of Vendor-controlled data. Content shall include rules for the storage and dissemination of data shared with other organizations. The data security program component shall include:
 - i. Vendor Security Policy Statements
 - ii. Software version control and its currency
 - iii. Access control techniques
 - iv. Data entry processes

- v. Processing accuracy
- vi. Distribution of output reports and introduction or release of data
- vii. Data and program back-up
- viii. Controls to prevent unauthorized use or removal of tape files, diskettes, and other media
- ix. Data encryption standards for storage and secure management
- x. Processing audit trails
- xi. Application testing
- xii. CMS access violations
- xiii. Intrusion detection notification and response procedures
- xiv. Virus prevention, detection and removal
- xv. Appropriate disposal of hardcopy data which may contain sensitive information or information which may allow compromise of information systems security

5.7.5 PROBLEM NOTIFICATION

All incidents or anomalies shall be reported verbally to the Commission immediately and shall be reported in writing to the Commission within twelve (12) hours of the event. At a minimum, incident and anomaly reporting shall include a description of the incident, its cause, impact on the operation and corrective action taken for each occurrence of CMS failure, operator error, deviation from established procedures and those items where liquidated damages are applicable.

5.7.6 SECURITY REPORTS

The Vendor shall provide read-only access to the CMS security access table or reports automatically generated from the CMS without human intervention showing CMS user privileges and authorities on a bi-weekly basis. These reports shall also include a copy of the user group/class assignments, authority levels and active user names.

The Vendor shall provide from the CMS e-mail notification without human intervention of report generation and certain file accessing as specified by the Commission. Vendor shall establish a procedure for reporting and notification of key alerts to the Commission. Changes to object code, key files, system value or options, security reports or network parameters shall be prioritized and reported/e-mailed based on severity and alert escalation process approved by Commission.

5.7.7 SECURITY PROGRAM UNDER THE CONTRACT

All computer systems provided by the Vendor shall meet or exceed standards set by the National Computer Security Center's Trusted Product Evaluation Program (TPEP), which tests commercial products against a comprehensive set of security-related criteria. All agencies, employees and Vendors of the State are responsible for protecting information from unauthorized access, modification, disclosure and destruction.

5.7.7.1 Personnel Security

- 1. The Commission may initiate investigations into the background of any officers, principals, investors, owners, sub-vendors, employees, or any other associates of the Vendor it deems appropriate. Background investigations may include fingerprint identification
- 2. Principals, Key personnel and key qualifiers who shall be performing services under the Contract and as determined by the Commission may be required to undergo a background investigation by the Commission.
- 3. The Vendor shall cooperate with such investigations and instruct its employees and sub-Vendors to cooperate. The Commission may terminate the Contract based upon adverse results of these background checks if the Commission determines that its integrity, security or goodwill may be in jeopardy.
- 4. The ability to conduct such investigations shall be a continuing right of the Commission throughout the Contract.
- 5. The Vendor shall report any change in, addition to, or deletion from, the information disclosed to the Commission. The report shall be in writing and delivered to the Commission within seven (7) RFR Central Monitoring System MGC-CMS-2015

days of the effective date of the change, addition, or deletion. The Vendor shall report the involvement of any of the Vendor's employees, owners, or agents in any known criminal arrest (exclusive of minor traffic violations) or investigation.

5.7.7.2 Security Violation Reporting

The Vendor shall immediately report any security procedural violation, violation of law (e.g., theft), of equipment, software or material used or to be used in the performance of this Contract. The report shall be delivered personally or by telephone immediately but not later than one (1) hour of the discovery of the incident, followed by a written report within twenty four (24) hours, to the Commission.

5.8 MANUALS AND DOCUMENTATION

The Vendor shall provide with the CMS, electronically to the extent possible, all associated operation manuals, service manuals, and relevant schematic diagrams. Operation manuals and service manuals shall be expressed in broad terms that are directly relevant to the complete CMS.

- 5.8.1 Operational manuals shall:
 - **5.8.1.1** Accurately describe the CMS which the manual is intended to cover;
 - **5.8.1.2** Provide adequate detail and be sufficiently clear in their wording and diagrams to enable a trained operator to use all functions in the application.
- 5.8.2 Service manuals shall:
 - **5.8.2.1** Accurately depict the CMS which the manual is intended to cover;
 - **5.8.2.2** Provide adequate detail and be sufficiently clear in their wording and diagrams to enable a qualified repair-person to perform repair and maintenance in a manner which is conducive to the long-term reliability of the CMS.
- 5.8.3 Circuit schematic diagrams shall:
 - **5.8.3.1** Accurately depict the Primary and Back-up Sites, Wide Area Network and wiring at each Facility (when available);

- **5.8.3.2** Provide adequate detail and be clear in their wording and diagrams to enable qualified technical staff to perform an evaluation on the design of the component;
- **5.8.3.3** Be professionally drafted and satisfy the above requirements; and
- **5.8.3.4** Be kept up to date at all times with updates being delivered within five (5) days of any changes.

5.8.4 Delivery of Manuals and Documentation

All manuals and documentation shall be delivered to the Commission and copies shall be maintained at both the Primary and Back-up Sites.

5.9 STAFFING

5.9.1 GENERAL

The Vendor shall provide all personnel necessary to meet the requirements of the Contract and to provide a high quality of service to all Facilities and Commission personnel. Specifically, the Vendor shall provide all staff as required to meet the timelines identified in the final Implementation Plan and to maintain support for Service Level Agreements.

The Vendor shall at least annually over the Contract term update its organization chart showing the current staffing positions/categories and number/list of personnel assigned. The Vendor shall provide the Commission with policies regarding staffing, work schedules and vacations, which shall be approved by the Commission.

The Commission requires the following minimum Vendor staffing in certain key areas, with all positions being full-time unless otherwise specified. The Vendor shall provide On-going Support Staff which shall be permanent positions in support of all requirements for the duration of the Contract term as specified in Section 5.8.3. The Vendor shall also provide Implementation Staff as specified in Section 5.8.2 which shall be provided in support of the implementation of the Central System at each of the EGD Facilities as they open and become operational, and shall remain with the implementation until at least two (2) weeks after the commencement of EGD operations at a Facility. The Implementation Staff shall be separate individuals in addition to the On-going Support Staff. All staff assigned to this Contract shall be subject to licensing by the Commission.

5.9.2 IMPLEMENTATION STAFF-PLANNING & INSTALLATION

Provide a staffing plan and relevant need for each position as a function within the overall operations. Please provide a detailed job description for each position. Please provide the level of staffing needed for start-up of facilities and on-going operations. The project manager must meet the qualifications below. All positions of this contract are subject to a background check.

5.9.2.1 PROJECT MANAGER

The Vendor shall assign a Project Manager to coordinate implementation of each Facility who shall be the primary point of contact between the Vendor and the Commission for all implementation matters for a Facility. The Project manager must be a certified PMP and have a minimum of 5 years experience of LAN/WAN infrastructure and/or Data Center build out project management experience.

The Project Manager performs day-to-day management of the project, identifies issues and risks and recommends possible issue and risk mitigation strategies associated with the project; is responsible for ensuring that work performed is within scope, consistent with requirements, and delivered on time and on budget; Identifies critical paths, tasks, dates, testing, and acceptance criteria; monitors issues and provides resolutions for up-to-date status reports; demonstrates excellent writing and oral communications skills. The Project Manager is responsible for providing timely communication and project updates to all stakeholders: Commission, Vendor, EGD Manufacturers and EGD Facility operators.

5.10 MAINTENANCE PROGRAM, SERVICE LEVELS AND SUPPORT

5.10.1 HOTLINE (CENTRAL REPORTING SYSTEM)

- 1. The Vendor shall provide a central trouble reporting system ("Hotline") whereby Facilities may quickly and easily report problems.
- 2. The Hotline shall be located at a site which shall be approved by the Commission upon Contract award. The Vendor shall also provide a location from which it will support the Hotline if the primary call center becomes for any reason inoperable.
- 3. The Hotline shall provide, at minimum, a single toll-free number with sufficient lines to ensure that no more than one (1) call out of every one hundred (100) calls receives a busy signal when calling the Hotline. The Vendor shall associate the Hotline number(s) with a system

capable of providing comprehensive ad hoc reporting including quality assurance monitoring. These records shall be provided to the Commission directly and immediately upon request.

4. The Vendor shall install and maintain an automated dispatch system for tracking all service calls and repairs which shall be flexible and include a database with ad hoc reporting. Access to this system shall be available to the Commission via a Management Terminal.

5. Reporting

The Vendor shall capture all information related to service calls, dispatches and resolutions. Ad hoc Hotline reports shall include, at a minimum:

- a. The date and time of the original call
- b. The identification of the Facility and caller
- c. The general nature of the trouble call
- d. The date and time of dispatch
- e. The date and time of problem resolution
- f. What the technician found upon inspection
- g. All comments associated with the service call
- h. Whether or not the service call went into penalty status with liquidated damages applying

6. Recording

- a. The Vendor shall record all incoming Hotline calls.
- b. The Vendor shall maintain recorded calls for at least sixty (60) days from the date a call is received.
- c. The Vendor shall make recorded calls available on-line to the Commission within twenty-four (24) hours of request.

7. Management

- a. The Vendor shall allow the Commission to actively participate in the development and revision of the information resources developed to help Hotline operators handle calls.
- b. The Vendor shall make a follow-up call to a Facility after an initial service request remains unfulfilled for more than two (2) hours beyond the required response time. The Vendor shall make an additional follow-up call daily, so long as the Facility's initial service request remains unfulfilled, to update the status of the request.
- c. The Vendor shall provide Hotline operator access to information about the status of telecommunication lines.
- d. The Vendor shall have a Hotline Quality Assurance and Training Program, which is subject to approval by the Commission.

5.10.2 FIELD SERVICE/SUPPORT

1. Facility Equipment

The Vendor shall arrive at a Facility location, and repair defective or poorly performing equipment within two (2) hours from the time the notice of the malfunction is received by the Vendor. Repairs shall be required $24 \times 7 \times 365$.

2. Telecommunications Failures

The Vendor shall be responsible for resolving all telecommunications issues within two (2) hours from the time the notice of the issue is received by the Vendor.

3. Opening of a Facility

The Vendor shall provide a maintenance technician on-site at each Facility 24 x 7 for at least a two (2) week period following commencement of EGD operations at the Facility.

5.11 ACCEPTANCE TESTING

5.11.1 INITIAL ACCEPTANCE OF CMS

- **5.11.1.1** Acceptance Testing, as used by the Commission, means an extensive process by which the Commission verifies and demonstrates that the delivered CMS or components meet all of the Contract requirements, that all equipment to be installed is compatible with the CMS and meets the Commission's standards for quality and are thus acceptable for deployment into the EGD environment.
- **5.11.1.2** The Commission will conduct Acceptance Testing during the initial installation of the CMS (Implementation Testing Section 5.12.2) and on an on-going basis throughout the Contract term.
- **5.11.1.3** The Commission shall be able to conduct Acceptance Testing to determine EGD functions and CMS compatibility. The Vendor shall provide an additional system, which must be of the same architecture, but not the same size, at an independent testing laboratory for testing purposes. If the EGD fails the Acceptance Test conducted by the Commission, the EGD manufacturer is responsible for making all modifications required by the Commission.
- **5.11.1.4** The Commission, or its designee, will conduct a series of Acceptance Tests, which the Vendor shall support. To support Acceptance Testing, the Vendor shall have the Primary Site, computer hardware, communications hardware, software, EGD controllers, and test EGDs installed and operational at least sixty (60) days prior to the scheduled opening date for the first EGD Facility to become operational. At that time, the Back-up Site shall also be ready for testing.

5.11.2 FACILITY ACCEPTANCE

The Commission takes a comprehensive approach to Facility Acceptance and shall have the right to perform any acceptance test that it deems necessary at any Facility. The results of these tests will determine whether the Commission approves the Facility to implement the CMS. The Commission shall have the sole right to determine the pass or fail decision for each of the Facility Acceptance and test components.

The Commission's Facility Acceptance Test script shall include, but is not limited to, the following:

Validate Diverse Points of Entry into Facility

Validate Disparate backbone paths

Validate CMS IDF complete

Room Construction Complete

Environmental systems functioning and tested

Phone Access available

Monitoring systems installed and operational

UPS available and tested

Fire Suppression Installed and certified Power and

Grounding installed tested All terminations clean and

labeled

CMS Racks installed, secured, and functioning

All wires neat using horizontal and vertical management

All Cabling/Terminations tested (certified)

CMS Communicating to Primary Site, Back-up Site and Facility

CMS Communicating to each EGD

The Vendor shall provide written documentation to the Commission of expected results, actual test results, and status of each exception.

5.12 IMPLEMENTATION

5.12.1 IMPLEMENTATION PLAN

The Vendor shall have provided in its Proposal a proposed Implementation Plan. The Vendor shall submit within thirty (30) days after Contract award a detailed and finalized version of this Implementation Plan which, when approved by the Commission, shall become the basis for Implementation. This Implementation Plan shall include but not be limited to the following:

<u>Executive Summary</u> - This Summary shall provide the Commission with a concise but functional summary of each phase of the Plan in order of progression and shall provide a map for the Commission to use in reviewing the Plan. Each phase shall be listed in chronological order, beginning with the date of Contract award and providing a clear indication of the flow and duration of the project.

<u>High Level Implementation Plan</u> - This shall include a brief description, start and end dates, roles and responsibilities, dependencies, input and outputs and deliverables, and shall ensure a smooth start-up of the CMS. This Plan shall include a timeline (Gantt chart), beginning with the Contract award date.

1. Implementation

- a. The CMS and components shall be delivered and operational by a date which will be specified by the Commission in coordination with the Facilities, and shall commence live operations at that time. All CMS hardware, software, equipment, staff and all other necessary requirements shall have been successfully tested by both the Vendor and the Commission and shall be in place and operational by the specified date.
- b. Once the Vendor resolves all exceptions noted during its testing, the software and/or hardware shall be made available to the Commission for Acceptance Testing. The Vendor shall provide the Commission with a copy of its test scripts and all test results (interim and final) before the Acceptance Testing date. The test system shall mirror the production system. Any differences between the test system and the production system shall be approved in writing by the Commission.
- c. The Commission will make the pass/fail decision for each test. The Vendor shall provide sufficient staff to fix any problems found during the Commission's Acceptance Testing and shall resolve any exceptions noted during the Commission's testing within the timeframe specified in the Implementation Plan.
- d. The Vendor shall provide operational support during the Commission's Acceptance Testing.
- e. The Vendor shall provide simulators for processing transaction volumes through the system.
- f. Project Reporting and Monitoring Requirements:
 - i. The Vendor and the Commission shall have, at minimum, weekly implementation reviews.
 - ii. The Vendor shall prepare weekly reports on the progress toward the goals and deadlines stated in the Implementation Plan. Reports shall be submitted electronically to the Commission in an agreed format such as Microsoft Project.

2. Definition of Business Requirements:

- a. During the first thirty (30) days after the Contract start date, a team of Vendor business analysts shall thoroughly familiarize themselves with the Commission's business processes, including the Facilities' business processes, related to EGDs. The team shall observe the business processes and meet with end users as needed.
- b. At the conclusion of this thirty (30) day period the Vendor shall deliver to the Commission a separate business requirements specification ("Business Requirements") document for each major functional area. The purpose of the Business Requirements documents is for the Vendor to demonstrate its understanding of the Commission's business requirements. The Commission will review and approve these documents within thirty (30) days of receipt. The documents shall address each business process currently performed by the Commission and the Facilities' business processes. The documents shall identify any modifications to current processes. At a minimum, the Vendor shall produce a separate Business Requirements document for each of the following functional areas that apply to the System:
 - i. System Administration
 - ii. Maintenance
 - iii. Accounting and Billing
 - iv. EGD Operations and Audit
- 3. Software Requirements Specification ("SRS")
 - a. Upon receiving the Commission-approved business requirements documents, the Vendor shall develop corresponding Software Requirements Specification ("SRS") documents. The Vendor shall deliver these documents to the Commission for approval no later than forty five (45) days after receipt.
 - b. The SRS documents are to specify the functionality of the software applications that will be provided by the Vendor at Start-up in support of the Commission's business processes related to EGDs. The startup software shall function as described in the SRS documents, which shall include, at a minimum, the following:
 - i. Each specification shall reference the corresponding business requirement or process in the corresponding business specification document.
 - ii. For each specification the Vendor shall indicate if the functionality exists in the Vendor's base system. If it does not exist, or if modifications to the base system functionality are required, the Vendor shall provide an estimate of the time it

will take to develop the new functionality or modify the existing functionality. The estimate, development and or modification shall be at no additional cost to the Commission.

- iii. For each specification the Vendor shall identify how the Commission may test the functionality in Acceptance Testing. Optionally, the Vendor may also identify how its own staff may test the functionality.
- iv. Commission approval is required for any subsequent changes to SRS documents. The Commission may identify changes during software development and Acceptance Testing.
- 4. If modifications or enhancements are required, the following shall apply:
 - a. Software Development:
 - i. The startup software shall meet the Commission's business requirements, and future changes to the software shall be accomplished in a timely manner while accurately meeting those business requirements.
 - ii. The Vendor shall understanding of the Commission's demonstrate its business requirements and processes before software applications for the CMS are written or modified. The Commission shall be given the prior opportunity to thoroughly understand and agree to the functionality of the planned software applications. This applies to the development of any initial software goal applications as well as to subsequent software releases.

5.12.2 IMPLEMENTATION TESTING

The Commission takes a comprehensive approach to Acceptance Testing and shall have the right to perform any acceptance test that it deems necessary. The results of these tests will determine whether the Commission accepts the CMS. The Commission shall have the sole right for determining the pass or fail decision for each of the Acceptance Tests and test components.

1. At a minimum, the Commission's user Acceptance Test script shall include, but is not limited to, the following:

Verify Terminal Identification and Validation at sign on

Manual and Automatic Disabling and Enabling of EGDs based on full floor, zone, bank or individual EGD
Verify TITO accuracy
Verify CMS and EGD general functionality and response time
Verify all CMS Reporting and Accounting is accurate and complete
Real-time Polling of Full set of EGD Meters
Validating of full set of EGD Meters
Performing validations and balancing accounting reports Performing
validations and balancing performance reports Performing transaction look-
ups
Test of a full floor sweep
Test of distribution and response of daily invoice.
Validate and balance the results of a meter-test during installation. Balance all reports
with all available data-
☐ Machine Financial
☐ Facility Financial
□ Winning Data

Verify exporting of reports – all formats Printing and

validation of all security reports Verify Asset Tracking

Software

Verify system Facility circuit Failover

Verify CMS Failover

Verify Facility failure/site controller failure and data recovery when back online

Checking for proper CMS response to thresholds by forcing the

CMS to reach its failure levels (transactions, meters, etc.).

Forcing EGD failures to verify proper system notification (including create print jams, disconnect power and communication cables, door opens, etc.)

Forcing Primary and Back-up System failures to verify proper CMS recovery (including disconnect power and communication cables, improper CMS operation, etc.)

Forcing EGD, network and System failures by volume testing System performance in transaction rate and capacity

Written documentation of expected results, actual test results, and status of each exception

- 2. All new programs and any changes to existing programs made by the Vendor shall be tested thoroughly by the Commission prior to installation. Acceptance Testing is used to assure that all programs used by the Vendor's operating and support systems and stated in this RFR are performing accurately and reliably prior to installation. In addition, testing also ensures that all accounting, management reporting and Facility support functions are operating accurately and reliably prior to implementation. All software installations, including network applications and CMS applications, shall be approved in writing by the Commission prior to installation.
- 3. The Commission intends to execute comprehensive Acceptance Testing prior to implementation of the CMS and for subsequent software releases. The Commission will approve the Vendor's development and execution of the Acceptance Test. The Vendor, however, shall be responsible for the quality of the System and software releases.

Commission approval for the implementation of software based on Acceptance Test results does not diminish the Vendor's responsibility for the quality of the software.

- 4. The Commission requires that Acceptance Testing be a cooperative effort between the Vendor and the Commission. The Vendor shall provide a system dedicated to Acceptance Testing. This test system shall be independent of the production systems. The Vendor shall have overall responsibility for the development and execution of the test scripts, but the Commission has the right to amend or reject the test plan. The Vendor shall assure that this test system is available to the Commission and that operational resources are available to assist the Commission in conducting and evaluating the Acceptance Testing.
- 5. When the Vendor is ready to deliver the Central System, the Commission will determine whether the CMS is acceptable according to previously agreed-upon criteria. The method for handling problems will be approved by the Commission. Before carrying out Acceptance Testing, the Vendor shall assist the Commission in identifying time schedules, procedures for evaluation, software/hardware environments and resources required, and acceptance criteria.
- 6. The Vendor shall perform extensive self-testing, de-bugging and quality assurance on all software prior to submitting it to the Commission for Acceptance Testing. All software submitted to the Commission for testing shall be fully operational and principally ready for production use. The Commission shall have the right to reject software that is not in Acceptable Testing condition.
- 7. During acceptance testing, the Vendor shall provide on-site personnel capable of modifying the operating System and all support systems. The on-site personnel shall be assigned to the Commission on a full-time basis during Acceptance Testing and be experienced with the specific hardware and software that is being tested.
- 8. The Vendor shall successfully meet the Commission's Acceptance Test requirements no later than one (1) week prior to the scheduled installation of any new software or System enhancements.
- 9. The Commission's requirements for Acceptance Testing include, but are not limited to, the following:
 - a. The encryption scheme shall be in effect during all tests.

- b. The Vendor's test system shall include all EGD types using all communication methods applicable in the live environment. The number and configuration of EGDs to be used for Acceptance Testing shall be determined by the Commission.
- 10. Performance Criteria: The Vendor shall ensure that all CMS support, including any network, software, hardware, and facility(ies), meets documented specifications and standards and shall pass performance testing criteria and be approved by the Commission in order to be in compliance with the Contract.

5.13 EGD FACILITIES

5.13.1 General

Each Facility is required to provide to the Vendor, at no cost, computer room space, HVAC, power and back-up power, cable infrastructure access to the EGD floor and storage area for spare equipment.

5.13.2 Permanent Facility

- **5.13.2.1** The Vendor is responsible for the design, coordination, installation, testing, training and operation of all CMS networks, internal and external connectivity and hardware for the permanent EGD Facility.
- **5.13.2.2** The cost of installation shall be charged to the Commission
- **5.13.2.3** All Wiring and data infrastructure installed by the Vendor for the gaming floor network shall be owned by the Commission. Wiring for the gaming floor network is to be controlled by the Vendor including final testing and all terminations. The Vendor shall be responsible for the monitoring and maintenance of all Vendor installed infrastructure within the EGD Facility. Vendor shall have network infrastructure cabling tested and certified and provide the results to the Commission.
- **5.13.2.4** The Vendor shall provide to the Commission an "as built" wiring schematic for all wiring at each Facility.

5.14 SERVER BASED DOWNLOADABLE GAMING

Server Based Gaming solutions will give the Commission the ability to enhance the customers' gaming experience by downloading games to a specific EGD, group of EGDs and/or progressive EGDs from a central location; to reconfigure those EGDs with new features or different games; to provide an array of services to players; and to deliver account-based gaming.

The Vendor shall provide all equipment, hardware, software and personnel necessary to provide the central monitoring, authentication and reporting for Server Based Downloadable Gaming.

All EGDs and servers shall communicate with an open protocol. The Commission's preference is for a system architecture that is designed to Gaming System Association ("GSA") recommendations and Game to System ("G2S") and System to System ("S2S") protocols. The Vendor shall provide a system capable of handling a combination of thin, thick and hybrid clients simultaneously.

5.15 DELIVERABLES

The following table identifies the items to be delivered to the State. Items are referenced to the corresponding Section of the RFR. Items are to be delivered to the Commission within the number of days listed in the Due Date column.

Deliverable Schedule

Phase	Deliverable Number	Deliverable Title	Due Date (NTP + X
			Days)
Planning			
		Planning Phase and Related Documents	
	1	Project Management Plan	NTP + 14
	2	Systems Engineering Management Plan	NTP + 14
	3	Quality Assurance Plan	NTP + 14
	4	SubVendor Management Plan	NTP + 14
	5	Risk Management Plan	NTP + 14
	6	Training Plan	NTP + 14
	7	System Architecture Configuration Documentation / Diagram and Hardware Listing	NTP + 14

		T	
	8	Vendor Software Service Level Agreement	NTP + 14
	9	Primary/Backup Physical Survey	NTP + 14
	10	Disaster Recovery Plan	NTP + 14
	11	Detailed GAP Analysis Report	NTP + 21
	12	Requirements Document	NTP + 30
	13	Requirements Traceability Matrix	NTP + 30
	14	Project Implementation and Baseline Schedule	NTP + 30
	15	Hardware/Software Installation and Acceptance	NTP + 30
Design			
		CMS	
		Central System Implementation Plan and	
	16	Baseline Schedule	*
	17	Requirements Traceability Matrix	*
	18	Detailed System Design Document	*
	19	Security Risk Assessment	*
	20	Data Dictionary	*
		Final System Architecture Configuration	*
	21	Documentation / Diagram and Hardware Listing	
EGD Facility	Startup –	Per Facility(up to 5)	*
	22	Implementation Plan and Baseline Schedule	*
	23	Facility / Vendor Communications Plan	*
	24	Detailed System Design Document	*
	25	Requirements Traceability Matrix	*
	26	Security Risk Assessment	*
		Final System Architecture Configuration	*
	27	Documentation / Diagram and Hardware Listing	
	İ		
Documentation			*
Documentation	28	Technical Specifications Documents	*
Documentation	28 29	Technical Specifications Documents QA/QC Test Results	

	31	Production Readiness Certification	*
Testing/			*
Implementation			
		CMS	*
	32	QA Test Summary Report	*
	33	Security Compliance Review	*
	34	Disaster Recovery Plan Test	*
		EGD Facility Startup – Per Facility (up to 5)	*
	35	WAN Communications Test	*
	36	Facility LAN Test	*
		End to End Testing (EGD to Primary and Backup	*
	37	Sites)	
	38	QA Test Summary Report	*
	39	Security Compliance Review	*

Note: An asterisk (*) denotes the dates submitted in the Vendor's Implementation Plan required by RFR Section 5.11.1. Because deliverable due dates are dependent upon the Commission's issuance of a Notice to Proceed ("NTP"), the timing shall be expressed in terms of NTP + X days.

6 ADDITIONAL TERMS AND CONDITIONS

6.1 ISSUING OFFICE

Massachusetts Gaming Commission 84 State Street, 10th Floor Boston, MA 02109

6.2 BIDDER COMMUNICATIONS

Bidders are prohibited from communicating directly with any employee of MGC regarding this RFR, except as specified in this RFR, and no other individual Commonwealth employee or representative is authorized to provide any information or respond to any question or inquiry concerning this RFR. Bidders may contact the contact person for this RFR in the event this RFR is incomplete or the bidder is having trouble obtaining any required attachments.

6.3 REASONABLE ACCOMMODATION

Bidders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of RFR information in an alternative format, must communicate such requests in writing to the contact person. Requests for accommodation will be addressed on a case-by-case basis. A bidder requesting accommodation must submit a written statement that describes the bidder's disability and the requested accommodation to the contact person for the RFR. MGC reserves the right to reject unreasonable requests.

6.4 RFR INQUIRIES

Bidders may make written inquiries concerning this RFR until no later than the date and time specified in **Section 1.4.2** of this RFR. Written inquiries must be sent to the address listed in **Section 3.1**, above, by fax to (617) 979-8454 or by e-mail to mgcprocurements@state.ma.us MGC will review inquiries received before the deadline and at its discretion prepare written responses to questions which MGC determines to be of general interest and that help to clarify the RFR. Any written response will be shared with all recipients of this RFR. Only written responses will be binding on MGC.

6.5 AMENDMENT OR WITHDRAWAL OF RFR

If MGC decides to amend or clarify any part of this RFR, any written amendment will be sent to all recipients of this RFR. MGC reserves the right to amend the RFR at any time prior to the deadline for submission of responses and to terminate this procurement in whole or in part at any time before or after submission of responses.

6.6 COSTS

Costs that are not specifically identified in the bidder's response, and accepted by MGC as part of a contract, will not be compensated under any contract awarded pursuant to this RFR. The Commonwealth will not be responsible for any costs or expenses incurred by bidders responding to this RFR.

6.7 CLOSING DATE

Responses received after the response due date and time specified in **Section 1.4.2** of this RFR will be rejected. Individual requests for extension of the time for submitting responses will be denied. All responses become the property of the Commonwealth of Massachusetts.

6.8 ACCEPTANCE OF RESPONSE CONTENT

The entire contents of the bidder's response shall be binding on the bidder. The specifications and contents of a successful bidder's response may be incorporated into the contract.

6.9 PUBLIC RECORDS

Upon conclusion of this process, all responses and related documents submitted in response to this RFR may be considered public records and as such be subject to the Massachusetts Public Records Law, G.L. c. 66, § 10 and G.L. c. 4, § 7 subsection 26.

6.10 RESPONSE DURATION

The bidder's response shall remain in effect until any contract with the bidder is executed or the bidder withdraws its proposal.

6.11 CONFIDENTIALITY

Bidders shall demonstrate that they can comply with all state and federal laws and regulations relating to confidentiality and privacy, and security of personal information, including but not limited to G.L. c. 93H, G.L. c. 66A, and associated regulations.

6.12 INCORPORATION OF RFR

This RFR and the selected bidder's response may be incorporated into any contract awarded as a result of this RFR to that bidder.

6.13 OPTION TO MODIFY SCOPE OF WORK

MGC reserves the right, at its sole discretion and at any time after release of the RFR and during the contract term, to modify, increase, reduce or terminate any requirements under the contract, whenever MGC deems necessary or reasonable to reflect any change in policy or program goals. MGC additionally reserves the right, at its sole discretion and at any time after release of the RFR and during the contract term, to amend the contract to implement state or federal statutory or regulatory requirements, judicial orders, settlement agreements, or any state or federal initiatives or changes affecting MGC agencies. In the event of a change in the scope of work for any contract tasks or portions thereof, MGC will provide written notice to the contractor and will initiate negotiations with the contractor. MGC reserves the right to amend the contract accordingly, including payments under, or maximum obligation of the contract.

6.14 AUTHORIZATIONS AND APPROPRIATIONS

Any contract awarded under this RFR is subject to all necessary federal and state approvals, as applicable, including the Office of the Comptroller, and is subject to appropriation of sufficient funding, as determined by MGC.

6.15 ELECTRONIC FUNDS TRANSFER (EFT)

All bidders must agree to participate in the Commonwealth Electronic Funds Transfer (EFT) program for receiving payments. A link to the EFT application can be found on the OSD Forms page

(www.mass.gov/osd). Additional information about EFT is available on the Comptroller's VendorWeb site located at: https://massfinance.state.ma.us/VendorWeb/vendor.asp.

Upon notification of award, contractors are required to enroll in EFT by completing and submitting the "Authorization for Electronic Funds Payment Form" to the SSST for review, approval and forwarding to the Office of the Comptroller, unless already enrolled in EFT. A link to the EFT application can be found on the Comptroller's VendorWeb site (see above link). This form, and all information contained on this form, shall not be considered a public record and shall not be subject to public disclosure through a public records request.

6.16 ELECTRONIC COMMUNICATION/UPDATE OF BIDDER'S/CONTRACTOR'S CONTACT INFORMATION

It is the responsibility of the prospective bidder and awarded contractor to keep current the email address of the bidder's contact person and prospective contract manager, if awarded a contract, and to monitor that email inbox for communications from the PMT, including requests for clarification. The PMT and the Commonwealth assume no responsibility if a prospective bidder's/awarded contractor's designated email address is not current, or if technical problems, including those with the prospective bidder's/awarded contractor's computer, network or internet service provider (ISP) cause email communications sent to/from the prospective bidder/awarded contractor and the PMT to be lost or rejected by any means including e-mail or spam filtering.

6.17 RESTRICTION ON THE USE OF THE COMMONWEALTH SEAL

Bidders and contractors are not allowed to display the Commonwealth of Massachusetts Seal in their bid package or subsequent marketing materials if they are awarded a contract because use of the coat of arms and the Great Seal of the Commonwealth for advertising or commercial purposes is prohibited by law.

6.18 SUBCONTRACTING POLICIES

Prior approval of the department is required for any subcontracted service of the contract. Contractors are responsible for the satisfactory performance and adequate oversight of its subcontractors. Human and social service subcontractors are also required to meet the same state and federal financial and program reporting requirements and are held to the same reimbursable cost standards as contractors.

APPENDIX A: KNOWN AND POTENTIAL GAMING LICENSE APPLICANTS



APPENDIX B: CENTRAL SYSTEM REQUIREMENTS CHECKLIST

CENTRAL SYSTEM REQUIREMENTS CHECKLIST

Requirements below are minimum requirements. Vendor may propose a Central System that exceeds any of these requirements.

l f	Description	Meets Requirement (Y/N)	
5.2.3	State of the art, fault tolerant, redundant, high availability, system, including all hardware, software and		
5.2.3	Duplex, triplex or multi-redundant configuration		
5.2.3	No shared peripherals		
5.2.3	No performance degradation with failure of a single component		
5.2.3	Immediate primary system recovery while maintaining transactions		
5.2.3	Immediate backup system recovery while maintaining transactions		
5.2.4 (1)	Central System capable of supporting maximum EGDs		
	(20,000) and Facilities (4), scalable for future enhancement		
5.2.4 (1)	Central System supports 20,000 EGDs and controllers during peak transaction performance.		
5.2.4 (2)	Central System operates on a universally accepted open protocol		
5.2.4 (2)	Central System capable of controlling all brands//models of		
	EGDs currently approved in a regulated jurisdiction.		
5.2.4 (3)	Central System capacity of at least eleven digit dollar amount		
5.2.4 (4)	The Central System is configurable and capable of future scaling and expansion of transactions, storage, Facility locations, and number of EGDs.		
5.2.4 (5)	Alarms and monitoring devices in place and automatically		
	notify the Commission if the Central System goes down. Environmental, system/network, etc. are considered.		

Section	Description	Meets Requirement (Y/N)	lf "No". Explain
5.2.4 (6)	Central system is able to start & cease gaming functions on individual, group or all EGDs basis. Automatic & manual		
5.2.4 (7)	If communication between Central System & EGD is disrupted, automatically resumes processing when communication is restored without loss of data.		
5.2.4 (8)	Central System provides warning for each EGD when polled meter is outside of expected parameters and provides thresholds for alert of Commission if any meters fall outside		
5.2.4 (9)	Central System provides a single point of entry for all management functions from secure browsers on the Commission's WAN or VPN.		
5.2.4 (10)	Central System accepts and processes adjustments to include specification of dollar amount and explanation for adjustment.		
5.2.4 (10)	Adjustments made from management terminals or computer files provided by Commission.		
5.2.4 (10)	Central System provides single screen for meter adjustments		
5.2.4 (11)	Central System provides capability for EGDs to operate for 72 hrs without connection to the Central System, with all data being collected and stored without loss		
5.2.4 (12)	Functions of Central System are not obtrusive for players, employees who require real time monitoring of security events,, financial transactions or service of the EGDs.		

Section	Description	Meets Requirement (Y/N)	lf "No". Explain
5.2.4 (12)	Central System performance does not degrade noticeably during normal functionality and provides the capacity to accommodate EGD populations, play volumes and event recording consistent with all specifications.		
5.2.4 (13)	Multiple systems in the configuration have a time synchronizing mechanism.		
5.2.4 (13)	Primary and Back-up Systems are time-synchronized.		
5.2.4 (13)	Synchronization with an external time standard is provided.		
5.2.6.2	All hardware, peripherals and other equipment is new, except that equipment used at temporary Facility may be reused at the corresponding permanent Facility.		
5.2.7.1	Central System automatically generates and sends daily to the Commission a report of the results of the daily software utility check.		
5.2.7.3 (2)	Protocol simulator:		
5.2.7.3 (2)	Simulator supports and exercises all transactions and message types		
5.2.7.3 (2)	Simulator is capable of generating common errors		
5.2.7.3	Simulator provides Performance/volume testing		
(2) 5.2.7.3 (2)	Simulator has operations manual		
(2) 5.2.7.3 (2)	Simulator runs on standard equipment such as PC or equivalent		
5.2.7.4 (1)	Central System initiates a signature validation test whenever any EGD is enrolled.		
5.2.7.4 (2)	If EGD fails signature validation, it is not possible to enable that EGD into normal mode without manual intervention at		
(2)	that EGD into normal mode without manual intervention at the Central System level.		

Section	Description	Meets Requirement (Y/N)	lf "No". Explain
5.2.7.4 (2)	Central System generates and submits to Commission a daily report for both validated and failed EGDs.		
5.2.7.4 (3)	Central System uses one of two signature check methods: game software image storage or pre-calculated signature results storage.		
5.2.7.4 (4)	Appropriate security such as password protection and file encryption for signature results.		
5.2.7.4 (5)	If image used for validating is comprised of more than one program/device the Central System has the functionality to allow the operator to load each component individually and then combine		
5.2.8.1	Central System monitors each EGD and creates reports using at least the following information:		
5.2.8.1 (1)	Number of cents wagered		
5.2.8.1 (2) 5.2.8.1	Number of cents won		
(3)	Number of cents paid out by printed ticket		
5.2.8.1 (4)	Number of cents accepted by printed ticket		
5.2.8.1 (5)	Number of cents accepted via coin, bill, ticket or other instrument of value		
5.2.8.1 (6)	Number of cents transferred to the EGD electronically		
5.2.8.1 (7)	Number of cents transferred from the EGD electronically		
5.2.8.1 (8)	Number of cents paid out via hand pay or canceled credit		
5.2.8.1 (9)	Number of cents paid out via jackpot		
5.2.8.1	Number of cumulative credits representing money inserted		

Section	Description	Meets Requirement (Y/N)	lf "No". Explain
(10)	by player		
5.2.8.1 (11)	Number of cents on the credit meter		
5.2.8.1 (12)	Number of games played		
5.2.8.1 (13)	Number of games won		
5.2.8.1 (14)	Number of times the logic area was accessed		
5.2.8.1 (15)	Number of times the cash door was accessed		
5.2.8.1 (16)	Each person who accessed the logic area and date & time		
5.2.8.1 (17)	Each person who accessed the cash door and date & time		
5.2.8.1 (18)	Number of all promotional credits received at the game (cashable and non-)		
5.2.8.1 (19)	Value of all promotional credits received at the game (cashable and non-)		
5.2.8.1 (20)	Number of all promotional credits sent from the game (cashable and non-)		
5.2.8.1 (21)	Value of all promotional credits sent from the game (cashable and non-)		
5.2.8.1 (22)	Number and value of other electronic credits including debit, gift, smart cards		

Section	Description	Meets Requirement (Y/N)	<u>lf "No". Explain</u>
5.2.8.2	Central System receives all meter data in real time in an on-	-	
	line, automated fashion.		
5.2.8.2	Central System polls all EGDs at least every hour		
5.2.8.2	No manual reading of meters in lieu of automated requirement.		
5.2.8.3	Central System acquires and reports actual EGD game meters, not external or Central System meter incrementation process.		
5.2.8.3	Central System reads and reports using the full set of actual		
5.2.8.4	Central System is able to process all EGD meter sizes and record lengths and is scalable for growth and enhancement.		
5.2.8.5	Central System provides breakout of promotional credits by		
5.2.8.5	Central System reports on promotional credits within a non-taxable threshold established by Commission, and if threshold is surpassed includes the credits over the threshold as taxable win.		
5.2.9	Local and Wide Area Progressive EGDs		
5.2.9.1	Central System is able to report progressive jackpot games linked at single/multiple/multi-state Facilities		
5.2.9.2	Central System produces reports that show the method used to arrive at jackpot amount.		
5.2.9.2	Includes documentation of credits contributed during polling cycles		
5.2.9.3	Central System produces fiscal reports that support and verify the economic activity of games and indicate the current jackpot amount, including:		

Section	Description	Meets Requirement (Y/N)	<u>lf "No". Explain</u>
5.2.9.3	Aggregate report showing the balancing of progressive link	,	
(1)	with regard to Facility-wide totals		
5.2.9.3	Detail report by location for each EGD showing cash in/out,		
(2)	and credits played/won		
5.2.9.4	Progressive controllers linking progressive EGDs are		
5.2.9.5	Progressive entry authorization log within each controller		
	and completed by any person gaining access to controller.		
5.2.9.6	Progressive meter or controller keeps the following		
	information stored in nonvolatile memory:		
5.2.9.6	Number of progressive jackpots won on each progressive		
(1)	meter if progressive display has more than one winning		
	amount		
5.2.9.6	Cumulative amounts paid on each progressive meter if the		
(2)	progressive display has more than one winning amount		
5.2.9.6	Maximum amount of the progressive payout for each meter		
(3)	displayed		
5.2.9.6	Minimum/reset amount of the progressive payout for each		
(4)	meter displayed		
5.2.9.6 (5)	Rate of progression for each meter		
5.2.10	Asset Tracking		
5.2.10.1	State-wide asset management for all EGDs is provided		
5.2.10.1	Includes asset tracking, hardware status, location,		
	maintenance history, inventory status, spare parts and whether		
	the EGD is leased or operator-owned.		
5.2.10.2	Provides ability for Commission to track all EGDs		
	statewide, both active & inactive for life of the EGD in State.		

Section	Description	Meets Requirement (Y/N)	<u>lf "No". Explain</u>
5.2.11	Reporting		
5.2.11.1	All data is extractable to readily available tools (Excel, etc.)		
5.2.11.1 (1)	Central System provides chronological report of all transactions.		
5.2.11.1 (2)	Central System provides two types of reporting tools:		
5.2.11.1 (3)	Data model (relational database) specifically for		
5.2.11.1 (3)	Data is real or near-real time		
5.2.11.1 (3)	Database includes all information collected by system		
5.2.11.1 (3)	Commission users are able to create individual reports.		
5.2.11.1 (3)	All information retrieved from relational database for reports is indexed and sorted.		
5.2.11.1 (4)	Provides ability to inquire into a Facility's account history for a specified date range.		
5.2.11.2	Central system daily report requests – Central System provides the required pre-designed reports.		
5.2.11.2 (1)	Software Utility Check Report		
5.2.11.2 (2) 5.2.11.2	Signature Validation Report		
(3)	Non-Reporting EGDs (due to non-communications)		
5.2.11.2 (4)	Non-Reporting EGDs (communicating but no data reported)		
5.2.11.2 (5)	Accounting Detail Report		
5.2.11.2 (6)	Financial Summary Report		

Section	Description	Meets Requirement (Y/N)	If "No". Explain
5.2.11.2 (7)	Prize Payout Report		
5.2.11.2 (8)	Facility Report		
5.2.11.2 (9)	Transaction Report		
5.2.11.2 (10)	Game Preference Report		
5.2.11.2 (11)	Hourly Game Play Report		
5.2.11.2 (12)	Accounting/Promotional Credits Report		
5.2.11.2 (13)	Progressive EGDs Report		
5.2.11.2 (14)	Asset Tracking Report		
5.2.11.2 (15)	Central System Failover Report		
5.2.11.2 (16)	Security/User Access Report		
5.2.11.2 (17)	Security Violation Report		
5.2.11.2 (18)	Security Update Report		
5.2.11.2 (19)	Daily Sweep Invoice Report		
5.2.11.2 (20)	Hotline Report		
5.2.12	Back-up copies of all software and data required for Central		
5.2.12	Data transport via secure methods and all backup data is encrypted.		
5.2.12	Complete audit trail for data available for Commission.		
5.2.13	Central System provides the Commission with the ability to research transaction history files in real-time.		

Section	Description	Meets Requirement (Y/N)	If "No". Explain
5.3	Monitoring		
5.3	A separate industry standard real time network monitoring system is provided.		
5.3	Provides direct access by the Commission.		
5.3	Provides single screen graphical display of WAN & LAN		
5.3	Communications test and monitor capability is available at Primary and Back-up Sites		
5.3	Network monitoring tools interface with and analyze protocols		
5.3	Network monitoring tools view transaction data for performance & capacity analysis		
5.3	Network monitoring tools create visual or audible alarms for problems		
5.3	Network monitoring tools are able to determine failure down to EGD bank level		
5.3	Provides Commission with real time display of network &		
5.3	Central System advises Commission when service has been disrupted and determines if fault lies with equipment or network		
5.3	System displays downtime of any equipment or communications circuits		
5.7.3	Central System Security		
5.7.3.1	User account files are not in plain text format and are encrypted.		
5.7.3.1	Central System writes to a log file and reports all successful/unsuccessful sign on and log off attempts made to the Central System.		

Section	Description	Meets Requirement (Y/N)	lf "No". Explain
5.7.3.1	Central System has the following security features:	, ,	
5.7.3.1 (1)	Captures User ID, username, sign-on date/time, and signifies successful/unsuccessful sign-on.		
5.7.3.1 (2)	Logs and reports all changes to the Central System by all users logged on		
5.7.3.1 (3)	Provides direct access to Commission for all security log files on daily basis		
5.7.3.1 (4) 5.7.3.1	Locks out users after three unsuccessful log-on attempts		
5.7.3.1 (5) 5.7.3.1	Has ability to assign users to groups and privileges to groups		
(6)	User password expire after 45 days		
5.7.3.1 (6)	Once an administrator resets the password, user must change it		
5.7.3.2	Complies with all Commission and State Security Policies		
5.7.3.3	Complies with ISO 15408 Common Criteria for Information Technology Security.		
5.7.3.4	Provides ability for the contractor's System Administrator to		
5.7.3.5 (1)	No connectivity to the Central System from outside the		
5.7.3.5 (2)	Any such capability, such as for remote monitoring or diagnosis of equipment or software, employs stringent security mechanisms such as message encryption, logging of sessions, Secure Tokens, etc.		
5.7.3.5 (3)	Connections to other remote systems/terminals are protected by firewalls, encryption, secure shell (SSH), Virtual Private Network (VPN) or other means. Any routers shall route traffic only to addresses defined in their routing tables as valid.		
5.7.6	Security Reports: The Central System provides to the Commission the following:		

Section	Description	Meets Requirement (Y/N)	<u>lf "No". Explain</u>
5.7.6	Read-only access to Central System security access table/reports without human intervention showing user privileges and authorities on bi-weekly basis.		
	Reports include user group/class assignments, authority levels and active user names.		
	E-mail notification without human intervention of report generation and certain file accessing.		
	Changes to object code, key files, system value or options, security reports or network parameters are prioritized and reported/e-mailed based on severity and alert escalation process		
5.8	Manuals and Documentation		
5.8.2	All operation & service manuals and schematic diagrams associated with the Central System are provided.		
5.8.2	Service manuals:		
5.8.2.1	Accurately depict Central System		
5.8.2.2	Provide appropriate detail so as to enable a qualified repair person to perform repair		
5.8.3	Circuit schematic diagrams:		
5.8.3.1	Accurately depict Primary & Backup Sites, WAN		
5.8.3.2	Provide appropriate detail to enable qualified technical staff to perform evaluation		
5.8.3.3	Are professionally drafted		
5.8.3.4	Are kept up to date and delivered within 5 days of any changes		
5.8.4	All manuals are delivered to the Commission and copies held at Primary & Back-up Sites		

Section	Description	Meets Requirement (Y/N)	lf "No". Explain
5.14.	Server Based Downloadable Gaming		
5.14	All equipment, hardware, software and personnel necessary to provide the central monitoring, authentication and reporting for Server Based Downloadable Gaming is provided.		
5.14	All EGDs and servers communicate with an open protocol.		
5.14	System architecture is designed to Gaming System Association ("GSA") recommendations and Game to System ("G2S") and System to System ("S2S") protocols.		
5.14	System is capable of handling a combination of thin, thick and hybrid clients simultaneously.		

APPENDIX C FINANCIAL PROPOSAL SHEET

FINANCIAL PROPOSAL SHEET

CENTRAL MONITOR AND CONTROL SYSTEM FOR

This form must be completed in its entirety and submitted by the Vendor with its Financial Proposal.

Do Not change or alter this form.

All Prices proposed shall be firm fixed prices for the entire term of the Contract to include the Renewal Option period, if exercised, and any other extensions. Vendors are reminded that the number of Facilities, number of EGDs and startup dates indicated in this Financial Proposal Sheet are estimates based on presently available information and are being used for price comparison purposes only. There is no guarantee of any minimum or maximum amount under the Contract anticipated to result from this RFR, and thus no earnings are guaranteed to the Vendor.

A. – CENTRAL SYSTEM FEE: The Vendor shall state its proposed price to provide all goods and services, equipment, hardware, software and personnel required by this RFR for providing a Central System located at the Commission's primary data center, a hot back-up located off site, software, and all other Central System components required by this RFR, except for those requirements located at a specific Facility and the communications network connecting the Facility to the Central System. The price shall be expressed as a Firm Fixed Price for the Monthly Flat Fee:

Flat Fee (Monthly)	<u>Months</u>	Total Estimated Contract Amount
\$	x 120	= \$(A)

<u>B. – EGD FACILITY FEES</u>: The Vendor shall state its proposed price to provide all goods and services, equipment, hardware, software and personnel required by this RFR for providing a Central System which are required to *be located at a specific Facility and the communications network connecting the Facility to the Central System.*

One-time start-up fees and on-going monthly support fees for each Facility shall be provided.

Prices shall be expressed as a Firm Fixed Price for the various Fees required below:

B1. Plainville/Penn National

Estimated Start-up Date - June 2015

Estimated Initial EGD Allocation – 1,250 EGDs; Maximum Allowed – 1,250

Flat Fee (One-Time or Monthly)	<u>Months</u>	Total Estimated Contract Amount
Start-up equipment and cabling \$	One-time	\$(1)
Monthly maintenance/support \$	x 120	\$(2)

B2. Region A/ Wynn Casino Resort

Estimated Start-up Date - November 2017

Estimated Initial EGD Allocation - 3,242 EGDs; Maximum Allowed -

Flat Fee (One-Time or Monthly)	<u>Months</u>	Total Estimated Contract Amount
Start-up equipment and cabling \$	One-time	\$(1)
Monthly maintenance/support \$	X 91	\$(2)

B3. Region B/ MGM Springfield Casion

Estimated Start-up Date - February 2017

Estimated Initial EGD Allocation - 3,000 EGDs; Maximum Allowed -

Flat Fee (One-Time or Monthly)	<u>Months</u>	Total Estimated Contract Amount
Start-up equipment and cabling		
\$	One-time	\$(1)
Monthly maintenance/support \$	X 100	\$(2)

B4 . Additional Facility TBD dependent on region C determinations

Estimated Start-up Date - TBD

Estimated Initial EGD Allocation – EGDs; Maximum Allowed –

Flat Fee (One-Time or Monthly)	<u>Months</u>	Total Estimated Contract Amount
Start-up equipment and cabling \$	One-time	\$(1)
Monthly maintenance/support \$		\$(2)

C. Monthly cost per additional EGD's at B1, B2 B3 or B4

Estimated Start-up Date – TBD

Estimated Initial EGD Allocation – EGDs; Maximum Allowed –

Flat Fee (One-Time or Monthly)	<u>Months</u>	Total Estimated Contract Amount
Monthly maintenance/support per additional 100 EGD's \$		\$(1)

FINANCIAL PROPOSAL SHEET (SUMMARY)

SUMMARY A. Central System Fee B. EGD Facility Fees	\$(A)
B1. Plainville Slot Parlor	\$	(B1)
B2. Region A Everett Site	\$	(B2)
B3. Region B Springfield Site	\$	(B3)
TOTAL ESTIMATED 10-YEAR	CONTRACT PRICE	= \$
(A)+(B1)+(B2)+(B3)		(BASIS OF AWARD)

B4. Additional Facil	lity TBD \$	(B4)	
C. Monthly cost per	additional EGD's at B1, I	32 B3 or B4 \$	
Signature:		Date	:
	ary Vendor/Contractor		
Name:		Title:	
(Printe	ed or Typed)		
Company:		Federal Tax	D#
Address:			