



STATE OF INDIANA

Request for Proposal 23-72828

**Indiana Department of Administration
On Behalf of Indiana Gaming Commission**

Gaming Laboratory Certification Testing Services

January 30, 2023

Attachment F

The content of this document has been prepared by BMM North America Inc., (DBA BMM Testlabs), exclusively for the perusal of the Indiana Gaming Commission.

**RFP 23-72828
TECHNICAL PROPOSAL
ATTACHMENT F**

Instructions: Please supply all requested information in the areas shaded yellow and indicate any attachments that have been included to support your responses.

2.4.1 Mandatory Requirements

- 2.4.1.1 Confirm that for the duration of its contract, respondent and Affiliate thereof, shall: (1) promptly disclose to the Executive Director, any contract with or services provided to a Supplier Licensee; (2) gain advance approval from the Executive Director before contracting with or providing services to any Casino Licensee; and (3) at all times maintain a level of independence that is adequate to conduct Certification Testing on behalf of the IGC, free of any conflicts of interest as determined by the Executive Director.

BMM Response: Yes. BMM reaffirms our ability to test and ensure that all the mandatory requirements listed above will be met and delivered.

- 2.4.1.2 Confirm that during the duration of its contract with the State, respondent, and any Affiliate thereof, shall: (1) not knowingly conduct Noncertification Testing on items or technologies that have already undergone Noncertification Testing by a different Authorized Independent Gaming Laboratory; and (2) develop and implement reasonable procedures to ensure the same.

BMM Response: Yes. BMM reaffirms our ability to test and ensure that all the mandatory requirements listed above will be met and delivered.

- 2.4.1.3 Confirm that Respondent's agents, employees, and any potential subcontractors meet the criteria outlined in Ind. Code 4-33-7-3 and 68 IAC 2-2-5.3(a). Respondent(s) selected for the contract will not be licensed.

BMM Response: Yes. BMM reaffirms our ability to test and ensure that all the mandatory requirements listed above will be met and delivered.

- 2.4.1.4 Confirm that Respondent has provided Certification Testing services, or a substantial equivalent, for at least two (2) gaming regulatory agencies in jurisdictions with commercial casinos since January 1, 2017.

BMM Response: Yes. BMM holds active licenses and has provided certification testing services for approximately 475 regulatory bodies around the world. Our global footprint spans 6 continents with representation in 15 offices worldwide. We pride ourselves on working proactively with regulators to support, educate, train, and offer recommendations on new technologies and concepts.

- 2.4.1.5 Will Respondent provide a complete list of state gaming regulatory agencies in jurisdictions with commercial casinos that Respondent or any of Respondents' Affiliates have contracted with or provided services to since January 1, 2017? If yes, please include the list as a separate attachment. Include dates of the contracts and/or services and a brief description of the scope of work for each.

BMM Response: Yes. Please refer to **Appendix 8 (CONFIDENTIAL)** for our state gaming regulatory agencies.

- 2.4.1.6 Will Respondent maintain a comprehensive, current, and accurate database of items and technologies that have been the subject of Certification Testing by the Vendor? Database should be capable of tracking which items and technologies are or are not ultimately approved for use in Indiana by the IGC.

BMM Response: Yes. Please refer to **Appendix 9 (CONFIDENTIAL)** for a copy of BMM's Online Approval Technology (BOAT) Manual.

- 2.4.1.7 Will Respondent provide proof that respondent's United States laboratories maintain current International Organization for Standardization (ISO) 17020 and 17025 certification? If yes, please include the documentation as a separate attachment.

BMM Response: Yes. Please see **Appendix 10 (NON-CONFIDENTIAL)** for copies of our ISO accreditation certificates.

- 2.4.1.8 Confirm that respondent is willing and able to provide IGC staff, upon request, with a complete explanation of any of the

Respondent's technical standards, test scripts, and/or Certification Testing results at no charge to the IGC.

BMM Response: Yes. BMM reaffirms our commitment to IGC that we will continue to maintain the ability to test products comprehensively, accurately, and provide consistent certification testing pursuant to and in accordance with the rules and regulations set forth by the IGC.

- 2.4.1.9 Confirm that respondent is willing to undergo continuous accuracy and effectiveness monitoring and evaluation by the IGC if deemed necessary by the Executive Director, and that respondent will provide all related documents and information to IGC staff upon request.

BMM Response: Yes. BMM reaffirms our commitment to IGC that we will continue to maintain the ability to test products comprehensively, accurately, and provide consistent certification testing pursuant to and in accordance with the rules and regulations set forth by the IGC.

- 2.4.1.10 Confirm that respondent takes steps to ensure the integrity of reports and certification standards including a requirement that respondent's test reports, inspection reports, or certification reports completed by a third party may only occur under a valid subcontractor agreement preapproved by the IGC.

BMM Response: Yes. BMM reaffirms our commitment to IGC that we will continue to maintain the ability to test products comprehensively, accurately, and provide consistent certification testing pursuant to and in accordance with the rules and regulations set forth by the IGC.

2.4.2 General Information

- 2.4.2.1 Respondent's legal name, address, e-mail, phone and fax number, and year of establishment.

BMM Response:

Formal Name: BMM North America, Inc
Established 1981

Business Structure: BMM North America, Inc. is a Nevada Corporation
May 10, 2000

Location/Mailing: 815 Pilot Road, Suite G
Las Vegas, NV 89119

Contact Information: Travis Foley, Executive Vice President
Email: travis.foley@bmm.com
Office: 702.497.2420
Mobile: 702.806.8121
Fax: 702.407.2421

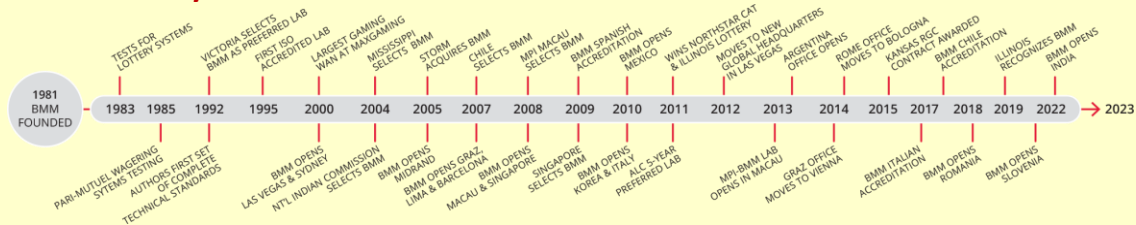
2.4.2.2 Provide a history of the company.

BMM Response: BMM North America, Inc. dba. BMM Testlabs (BMM hereafter) takes pride in being the oldest independent test lab focused specifically on gaming and wagering testing. BMM has been providing testing and compliance services on behalf of regulators and government agencies worldwide since 1981.

In 2001, BMM opened our first office in the United States, located in Las Vegas, Nevada. This office has now become the world headquarters for the organization. From this base, BMM is systematically growing our business in North America, serving multiple government regulatory bodies and jurisdictions.

As an overview, below are BMM corporate highlights including company milestones and a listing of some of our clients.

BMM's History Timeline



BMM focuses our efforts on providing worldwide coverage for the fast-growing regulated gaming markets. Currently, we have 14 locations around the world, servicing approximately 475 gaming jurisdictions and employing a staff of approximately 520 employees.

BMM's Global Map

Global oversight of BMM is conducted by BMM International headed by BMM's Global CEO Martin Storm. BMM International provides global services to BMM's business regions and our local entities in the areas of sales, human resources, finance, licensing, and operations. BMM's regional operations are separated into three specific regions, Australia/Asia/South Africa, North America, and Europe/South America. The three key regions are managed by BMM executives along with regional and local managers of Operations, Sales, Service Delivery, Technical Compliance, and Quality Management.

BMM has been providing testing and compliance services on behalf of regulators and government agencies worldwide since 1981. Our mission is to provide exceptional client services by delivering outstanding results. BMM strives for success in meeting our mission by addressing the 'four Cs' in our own business and when working with our clients. The four Cs are:

- Complexity
- Control
- Compliance
- Cost

BMM always provides a rich engagement model which reduces complexity and enhances control for our clients, while increasing product compliance and typically reducing the total cost of compliance. We do this by clearly understanding our clients' products and development style and assisting them to develop compliant products more efficiently. This allows clients to move forward in development with a clear understanding of requirements for compliance and reduces unnecessary resubmissions for compliance purposes.

2.4.2.3 Provide a summary of the professional experience of each company owner.

BMM Response:

Martin Storm

Global CEO & President

Phone: + 61 3 9895 9888

E-mail: storm@bmm.com

Martin Storm is the Global CEO of BMM International LLC, a leading, global gambling compliance business. BMM provides compliance leadership, as well as tests and certifies games, systems, equipment, networks, and RNGs across gaming, wagering, lottery, security testing and sports-betting markets in some 475 jurisdictions around the world.

Martin began his BMM tenure as Global CEO in January 2003 and has been responsible for growing BMM beyond our initial domestic market in Australia that included test labs in Melbourne and Sydney. BMM's world headquarters in Las Vegas, NV along with offices located in Peru, Australia (Melbourne and Sydney), Singapore, Argentina, Spain, Italy, South Africa, Canada, Slovenia, Macau, India, Poland, and Romania

Previously:

- Martin excelled in a range of business and strategic development roles at multinationals and private companies. Most results emanated from the information technology sector, where Martin has been involved since 1985.
- Prior to joining BMM, he provided a range of risk management consulting services, special project capabilities, and executive support at TAB Limited (Sydney, Australia), dealing at the executive team level.
- Martin was a founder of Channel E Ltd that listed as an IT web and media content company on the ASX in 1999, and he participated as an executive director on the board of that public company.
- Prior to Channel E, he worked for object-relational database innovators, Informix, as General Manager for the Southern Region and prior to that at market leader at Oracle Corporation in sales.
- Martin was the driving force behind ICL's dominance in the stockbroking back-office client accounting market in the late 1980s and early 1990s, growing its market share from 10% to 50% in a 3- to 4-year period.

Global oversight of BMM is conducted by BMM International headed by BMM's Global CEO, Martin Storm. BMM International provides global services to BMM's business regions and our local entities in the areas of sales, human resources, finance, licensing,

and operations.

BMM's regional operations are separated into three specific regions, Australia/Asia/South Africa, North America, and Europe/South America. The regions are managed by three key BMM executives along with regional and local managers of Operations, Sales, Service delivery, Technical Compliance, and Quality Management.

We have a stable, experienced, and committed management team capable of serving the IGC's requirements. The overall management structure can be found in **Appendix 1** for review.

- 2.4.2.4 Provide the number of staff members employed by the company, by division or department, along with the resume of each employee who will directly manage or supervise tasks associated with this contract and a summary of the work it is anticipated each manager/supervisor will perform. Include an organizational chart identifying: (1) the name(s) and title(s) of such management/supervisory staff; (2) the title and number of all positions that directly or indirectly report to each; and (3) a delineation of distinct operating divisions within the company.

BMM Response:

BMM employs approximately 520 professionals in 14 locations across the globe.

Department	Asia Pacific/ South Africa	Europe/South America	North America (includes BMM International, and associated entities)
Administration	8	13	12
Research & Development	1	19	4
Quality	1	4	3
Compliance	2	15	34
Sales & Marketing	5	7	8
Service Delivery	138	89	157
Total Employees by Region	155	147	218
Tenure at BMM			
Greater than 10 years	31	9	18
5 to 10 years	9	8	42
1 to 5 years	36	83	86
Less than 1 year	79	47	72

Please refer to **Appendix 1** for the BMM North America/BMM International and Service Delivery organization charts.

An overview of the BMM leadership team for this engagement is outlined below. Each

of the individuals listed will dedicate the time necessary to ensure all agreed to expectations and deliverables continue to be met for IGC. Approximately 180+ BMM resources from our Service Delivery, Quality, Administration, and Technical Compliance teams will be fully available based on IGC's requirements.

BMM will continue to deliver the following team:

Travis Foley

Executive Vice President, Operations, Americas (Las Vegas, NV)

Travis has spent over 20 years in various capacities in the gaming industry including regulatory, manufacturing, and independent testing laboratory. In his role, he is responsible for the overall operations of BMM globally as well as executive management of BMM's North American businesses. Prior to joining BMM, Travis was with the Nevada Gaming Control Boards Technology Division for 13 years where he was involved in the creation of regulations and standards for new technologies such as wagering systems, server-based gaming, system supported gaming, and mobile gaming.

Travis holds a degree in BS in Electrical Engineering from the University of Nevada, Reno.

Elizabeth Orola

Senior Director, Service Delivery (Las Vegas, NV)

With over 24 years of experience, Elizabeth excels at managing the daily operations of our Service Delivery teams in North America and Canada. She is well versed in engineering best practices, strategic planning, support, and delivery. Elizabeth has worked with various clients including managing R&D, QA, and systems integration projects for Fortune 500 technology companies. She has directed engineering development teams and QA teams across the world, including in the US, Canada, UK, Australia, and India.

Graduating with a degree in Computer Science from the University of Illinois, Elizabeth has focused her career in electronics, software, and QA in the Telecommunications, Aerospace, and Gaming Industries.

Anuj Nayyar

Director, Service Delivery, (Las Vegas, NV)

Anuj brings over 11 years' experience in the field of engineering with 6 years' experience with software and hardware testing at BMM. Anuj expertly manages complex tasks and assignments in his role and is responsible for end-to-end projects for multiple clients across North America, South America, Europe, and Asia. He also oversees a team of highly-skilled test engineers and manages projects to ensure the quality of work/tests is in strict adherence to BMM's standards and procedures. As a Field Inspection Manager, Anuj is also responsible for ensuring all engineering staff is properly trained in accordance with BMM's ISO 17020 accreditation prior to performing

any onsite compliance verifications, audits, or assessments.

Anuj holds a Double Master's in Electrical Engineering and Mathematics from the University of Nevada Las Vegas.

Atul Sancheti

Director, Service Delivery, (Las Vegas, NV)

After finishing his education with dual master's degrees in electrical engineering and Mathematical Sciences from the University of Nevada in Las Vegas. Atul Sancheti has focused his career in the gaming Industry, learning different aspects of gambling compliance and regulations. With over 9 years of experience, Atul manages the daily operations of BMM's Service Delivery teams in North America, Canada, and India. He has worked with major BMM clients and is well versed in engineering best practices, strategic planning, support, and delivery. He has also trained the BMM test teams in North America, Canada, and India locations.

Derek Smith

Vice President, Technical Compliance (Las Vegas, NV)

With more than 30-years in gaming across multiple genres of charitable, casino, and online, Derek has established himself as a comprehensive leader in industry technical standards. Consistent across each of his roles past and present, Derek has forged strong collaborative programs with regulators, manufacturers, and industry organizations to support technology advancement and innovation. With published regulatory contributions in more than two dozen jurisdictions globally, Derek is a proven compliance advocate with a record of achieving alignment between conformance requirements and the latest technological developments.

Peter Nikiper

Director, Technical Compliance & Regulatory Education (Las Vegas, NV)

Peter brings significant expertise in testing gaming products and knowledge of what meets regulatory requirements across regulated gaming jurisdictions. Peter's role at BMM is to ensure that technical regulations established by the numerous gaming jurisdictions in the Americas are correctly interpreted by BMM's Service Delivery team when executing compliance testing. Prior to joining BMM, Peter spent nearly seven years in a Senior Engineer position within the systems group at Gaming Laboratories International.

Peter holds a BS in Computer Engineering from the New Jersey Institute of Technology.

June Light**Director, Math (Las Vegas, NV)**

Starting her gaming career as a software developer for a manufacturer, June brings the unique perspective of one of BMM's key client groups to her position and is sensitive to the urgency of delivering a compliant product to market as quickly as possible. June joined BMM as a Test Engineer and worked her way through several positions including Senior Test Engineer, Team Lead, and Group Manager, to her current position as Director, Mathematics. During her time as Group Manager, June became the BMM representative to the GSA (Gaming Standards Association) and was the first Test Engineer to be G2S certified in the industry.

June holds a BS in Applied Mathematics from the University of Nevada Las Vegas.

Nicole Babbs**Global Quality Director (Las Vegas, NV)**

With over 20 years of experience in the gaming industry, Nicole's background includes project management; jurisdictional requirements and regulations; and quality accreditation, systems and processes. In her role at BMM, she is responsible for ensuring the quality of BMM's work by overseeing quality issues and maintaining BMM's Quality, Product, Procedures, and Standards manuals; on-going education of team members; and dissemination of quality standards throughout BMM. By identifying trends in satisfaction ratings, she drives action within the organization to ensure quality deliverables.

Nicole holds a BS in Applied Science from RMIT University in Melbourne.

Please see **Appendix 11 (CONFIDENTIAL)** for full resumes of the above management team who will directly manage or supervise tasks associated with this contract.

- 2.4.2.5 Provide an explanation of the human and other resources Respondent possesses in the disciplines of: mathematics; engineering (e.g., mechanical, electrical, software); gaming/accounting systems and communication protocols; compliance and quality assurance; and field inspections. Include an explanation of company policies and procedures in place to ensure independent work product verification as well as a description of Respondent's quality assurance staff.

BMM Response: Being ISO accredited attests to BMM's level of quality processes and procedures, along with our technical capabilities to perform testing within the gaming industry, including appropriate separation of duties required by IGC.

BMM will maintain the appropriate number of professionals necessary to meet the

current submission volume. A key factor considered in our resourcing is a reasonable completion time for projects dictated by submitting parties.

Our organization resources are categorized into four main areas:

- Executive Operation Management
- Quality
- Technical Compliance
- Service Delivery

ROLES AND RESPONSIBILITIES – EXECUTIVE OPERATION MANAGEMENT

EVP Operations

Responsible for the overall management of BMM operations in North and South America. Coordinates operations with the various business area management leaders in Business Development (BD), Quality, Technical Compliance, and Service Delivery (SD). Works with the BD team management in the areas of revenue forecasting, client issues, engineering headcount, and other areas in which the SD and BD groups deem necessary. Works with Quality and Technical Compliance management to ensure the overall business goals relating to quality and compliance are met or exceeded. Participates as a Compliance Committee Member. Prepares and monitors all program plans and liaises with the CEO regularly and with the executive team as appropriate. Reports directly to the Chief Executive Officer.

ROLES AND RESPONSIBILITIES – QUALITY AND TECHNICAL COMPLIANCE

To ensure the understanding of all employees, position responsibilities, accountabilities, and qualifications are detailed in position descriptions available on BMM's Quality Drive in Position Descriptions folder. This drive is read accessible to all staff. Reporting structures are shown in organization charts in **Appendix 1** or in the individual position descriptions.

Director, Quality

Designs, manages, and monitors BMM's Quality Program. The Director of Quality is responsible for consulting on quality issues, maintenance, controlling revisions, and distributing BMM's Quality, Procedures and Standards Manuals. The Director is also responsible for managing the implementation of customer complaints and corrective/preventive action processes, managing the internal audit program, performing QA review of projects and invoicing as required, ensuring the quality of work by advising and monitoring adherence to company standards and procedures, coordinating management review of the quality system through regular group QA meetings and the annual management review meetings, ensuring the on-going education of staff and the dissemination of information in regard to quality-related issues through the induction of new staff, participating in staff meetings and

discussions, and reviewing correspondence as required. The Quality Manager is the liaison with international standards and quality assurance organizations as necessary to assist with and further BMM's quality objectives, maintaining records and ensuring that formalities are fulfilled as required by standard certification agencies to which BMM currently subscribes and monitoring staff in their adherence to company standards.

Vice President, Technical Compliance

Responsible for maintaining BMM's internal jurisdictional regulation database by verifying regulatory information is accurate and current. Maintains internal Jurisdictional Matrix sheet with current regulatory information. Accountabilities include: ensuring that jurisdictional information reflects the most current regulatory information, providing information to Service Delivery management regarding regulatory information updates and changes, as well as technical development status and recommending technical development approaches to maximize future business, ensuring internal expectations are met with respect to timeliness and quality of deliverables, communicating to delivery and management teams when existing technical capabilities and processes need to be reviewed or replaced and when new capabilities should be provided, participating in appropriate forums and meetings where attendance is required, helping support BMM's business development and operations, providing information to management and the business development team regarding regulatory status and plans, recommending approaches to management to maximize future business, and assisting in training internal and external engineers and clients on BMM database products and services.

Senior Manager, Legal & Compliance (BMM International)

Responsible for the corporate licensing function of BMM International and all related entities including researching licensing and reporting requirements; drafting/filing gaming-related and corporate governance applications; following up on filed applications regarding status of licensure; preparing/providing document requests for licensing investigations and inspections; organizing interview logistics, dates and availability of licensees for investigations with licensing entities; updating and maintaining licensing data; organizing/updating licensing information of the officers/directors and key employees as well as the company and relevant subsidiaries; ensuring calendar renewal of licenses as well as corporate governance of annual lists and filings; notifying regulatory agencies of material company changes; reporting licensing status; and obtaining/maintaining corporate qualifications, annual lists, and business licenses as applicable in the various jurisdictions where BMM is licensed or anticipates licensure.

The Senior Manager also serves as a Compliance Officer for the BMM Compliance Committee with the following responsibilities: conducting and maintaining all diligence matters related to entities BMM conducts business with along with matters related to BMM personnel, setting the Compliance Committee agenda, and maintaining and

upholding the BMM Compliance Program with support from the Chief of Staff, BMM International, regional managers including the EVP Operations for BMM North America, and in conjunction with Human Resources.

ROLES AND RESPONSIBILITIES – SERVICE DELIVERY

To ensure the understanding of all employees, position responsibilities, accountabilities, and qualifications are detailed in position descriptions available on BMM's Quality Drive in Position Descriptions folder. This drive is read accessible to all staff. Reporting structures are shown in organization charts in **Appendix 1** or in the individual position descriptions.

Vice President, Service Delivery

Plans, develops, coordinates, and controls the engineering Services Delivery (SD) group on a daily basis. Works with the Group Managers in the areas of project management, negotiating project deadlines and costs with clients, and managing client and project issues. Organizes a weekly Group Manager team meeting, allocating tasks between the teams so that they have sufficient work and providing Group Managers with regular feedback on their performance. Prepares and monitors all program plans and liaises with the EVP Operations regularly, and with Director of Quality as appropriate.

Senior Group Manager and Group Manager

The Senior Group Manager position is responsible for directing and managing designated resources; providing technical support and training to team members; ensuring the quality of the team's work by supervising, promoting, field inspections, and enforcing adherence to BMM's standards and procedures; reviewing client status prior to submittal; reviewing team time slips weekly and making billing decisions for all team projects; scheduling and running a weekly team meeting; allocating tasks in the team so that they have sufficient work; and providing team members with regular feedback on their performance.

Director/Computer Scientist, Math

Responsible for evaluating the theoretical return for each gaming theme submitted for review, with particular attention to specific rules involving payout percentages, odds, volatility, symbol weights, bonus triggers, and the specific rules of each game play. Performing analysis of random number generators used for gaming purposes. Developing and maintaining proprietary tools used to analyze all aspects of numerical analysis.

As required, the Director/Computer Scientist will perform or direct a Computer Scientist to perform, but not be limited to, the following duties:

- *Numerical Analysis:* Perform sufficient analysis of each game theme to ensure

compliance with regulations regarding payback percentage, volatility, odds of all available awards, symbol weights, rules for bonus triggers, and any unique rules for each game.

- *Simulation Program Review:* Verify via independent analysis simulation programs submitted by manufacturers used for mathematical, statistical and probability calculations to determine accuracy and, with regard to regulatory goals and integrity. Simulation programs are used to run a series of statistical tests to produce a confidence limit of attributes that are permissible within the rules.
- *Winning Combination Determination:* Use probability, statistics, and permutation formulas to determine the combinatory outcome of all payouts represented in the submitted program.
- *Computer Programming:* When necessary, develop programs to assist the department in performing the necessary mathematical, statistical, and probability calculations required for game analysis.
- *Random Number Generator Analysis:* Use the appropriate statistical tool(s) to analyze the collected data to determine the randomness in the application of the random number generator. These tests include both proprietary BMM tests and tests available as open source. Create reports and graphs to document the analysis and findings. Perform or direct the review of source code to ensure that the changes to the code comply with all regulatory requirements.

Senior Test Engineer and Test Engineer

Deliver all specific accountabilities identified below where he/she is assigned the role as project leader or as a participant in team-based projects reporting to a project leader. The Senior Test Engineer may be asked to manage complex projects that involve other team members. The accountabilities include ensuring all tests necessary for the project are carried out, ensuring the quality of work/tests through strict adherence to BMM's standards and procedures, documenting all test results, managing all incidents that are raised on the project, directing other team members who are participating in the project as required to meet the project's objectives, and completing the project to agreed deadlines within budget. Notifies the Group Manager in a timely manner if the accountabilities cannot be achieved. Important tasks include ensuring accuracy of reports (status and recommendation reports documented during the project), adhering to BMM's project management procedures, recording and reviewing employee time sheets, and continuing improvement and review of BMM's standards and procedures to achieve high quality deliverables.

Laboratory Manager

The Laboratory Manager is responsible for maintaining the laboratory environment and testing tools, identifying new tools required for testing, managing the timely calibration and validation of equipment, conducting laboratory equipment receiving inspections, and ensuring that staff is aware of the safety precautions required in the laboratories.

BMM invests time to attract top talent around the world to join our team. We further

invest in retaining our talent and continuing to help them grow in their roles to be subject matter experts and strategic client advisors as well as experts in executing their tactical areas of responsibilities. Based on our staff experience and expertise we are confident IGC will find our team has significant proficiency and knowledge in the specific areas requested.

BMM Employee Background Checks

The BMM team is comprised of talented, ethical, and experienced staff. BMM conducts a background check as part of employment and continues them on a regular basis. The background checks are completed by First Advantage SBS and consist of the following:

County Level Criminal Check - perform a county court records search for any felony and/or misdemeanor convictions within the last seven years throughout the United States.

Social Security Track - provide a reporting of all aliases, including maiden names, as well as a list of current and previous addresses used.

BMM maintains a policy which requires all employees of BMM North America to notify the Human Resources of any significant changes to personal information within 10 business days. These items may include change of address, bankruptcy, civil suits, separations, criminal charges, etc. Criminal charges include but are not limited to theft, assault, battery, theft, DUI, disorderly conduct, and trespassing. (Excluding minor traffic violations).

KPI Monitoring

Each Service Delivery team member has a documented KPI program that is tracked and reviewed annually by our senior management team. *Some of the KPI measurements in the employee program include:*

1. Zero defects reported on work performed – as measured by project folder audits carried out by Technical Compliance/Director Service Delivery.
2. Accurate toolbox entries including time-slips, correct project numbers, client activity and description – as measured by time-slip and invoice reviews carried out by Director Service Delivery.
3. Adherence to BMM policies and procedures – as measured by general behavior, project management audits, toolbox audits, and assessment by the Director Service Delivery.

Policies & Procedures

BMM maintains policies, programs, procedures, and instructions to reflect regulatory directions, and we continue to develop new policies, programs, procedures, and instructions to reflect the most recent regulatory directions. We audit these items specifically on a yearly basis to ensure they reflect current business processes and integrate appropriately with the business processes of our clients. Beyond the yearly audit, we also make amendments as required based on regulatory and policy changes and communicate to our team and as required, to our clients.

We have included copies of some of our policies, programs, and procedures in **Appendix 12 (CONFIDENTIAL)** for your review that we feel provide you with a solid cross-section. Should there be other documents that interest IGC, we are pleased to provide as requested.

- Compliance Policy North America
- Error Control Policy
- Quality Policy
- Traceability Policy
- BMM Business Continuity
- IT Policy
- Control of Client Supplied Items
- The BMM Way

Information Security Incident Management Policy

It is important to note that while we have a set of standard policies and procedures, BMM remains flexible to client needs and will amend templates for clients at their request. These amendments are made only for specific client templates and only affect specific requirements per client. We make collective changes for all procedures due to regulatory or compliance requirements. BMM believes in an open dialogue with our clients and strives to ensure we have alignment with our policies and procedures with client requirements.

BMM is formally recognized by the American Association for Laboratory Accreditation (A2LA) for our resources, capabilities, objectivities and technical competence of the testing authority or person to provide gaming systems tests. These are tests and examinations of gaming machine hardware and software in accordance with North American and similar gaming regulations, both in-house and off-site excluding cabinet interference tests and power supply tests. BMM is also recognized for the testing of wide area gambling equipment for lotteries and wagering.

BMM maintains several ISO accreditations throughout our global organization. In North America, BMM is accredited by the American Association for Laboratory Accreditation (A2LA) to ISO/IEC 17020, ISO/IEC 17025, and ISO/IEC 17065. The accreditations are

formal recognitions of the quality of our resources, capabilities, objectives, and technical competence in the areas of testing, inspections, and certifications in accordance with North American and similar technical regulations and standards.

These accreditations, specifically ISO/IEC 17025, are typically required by regulatory bodies to perform testing, field inspections, and certifications. BMM was the first gaming lab to be ISO accredited (1995). Globally, BMM continues to expand our ISO accreditations including the addition of ISO/IEC 17065 in Europe. ISO accreditation shows BMM's commitment to our own formal processes, but remains only one part of overall quality.

We have also been awarded a Global Partnership with the International Software Testing Qualifications Board (ISTQB). ISTQB is the world's most successful scheme for certifying software testers, and as of December 2017, ISTQB has administered over 785,000 exams and issued over 570,000 certifications in over 120 countries worldwide. This prestigious partnership recognizes BMM for our demonstrated commitment to software testing, training, and qualifications. As a global partner, BMM has achieved over 1,000 certification points relative to the minimum 58 points required to achieve this status.

	Australia	Canada	North America	South Africa	Spain	Singapore
ISO 17025	X	X	X	X	X	X
ISO 17020			X		X	
ISO 17065			X		X	
ISTQB	Gold	Platinum	Gold			

Please see **Appendix 10** for copies of our accreditation certificates.

To maintain our accreditation with A2LA, BMM's process and procedures are externally audited bi-annually by this independent body including change management procedures, test plans and test scripts, internal and external reporting, certification reports, test tools, sales, and customer service procedures.

Being ISO accredited provides our regulatory clients with the confidence that BMM's processes are not only in place but continually improving in a proven, audited, and accredited methodology.

To support this and maintain our A2LA accreditation, we employ a full time Quality Director that documents and manages the system with required modifications to ensure best practices including:

- The internal processes and procedures, which are then followed by other appropriate groups
- The creation and release of modified test scripts, which are then used by other appropriate groups
- Development of report templates
- Anything related to our accredited BMM Way

The BMM Way contains procedures covering client engagement, software security, internal policies, testing procedures, test methods, technical standards, testing results, issues found during testing, and other relevant information used in BMM's certification process.

Part of BMM's Quality System ensures appropriate independent work groups for engineering (software and mechanical), mathematics, systems and communications protocols, technical compliance, and quality assurance. All groups are formally trained and audited in the areas of BMM's custom project tools, accurate and complete document control, and record keeping on a per project basis.

All BMM employees are trained and required to adhere to proven accredited methods. Oversight is ensured by only allowing authorized and qualified staff members to approve procedures, software, and equipment use. BMM maintains a suitable inventory of equipment and authorized versions of software used to test, inspect, evaluate, and certify products submitted. Records for equipment which require calibration are maintained and kept current.

Checks and balances to ensure adequate separations of duties are managed by three departments, other than executive management, including Technical Compliance, Service Delivery (engineering), and Quality management.

- 2.4.2.6 Provide a complete explanation of any internal policies and procedures that Respondent currently uses to track and measure both the accuracy and the effectiveness of Respondent's technical standards and test scripts.

BMM Response: BMM currently uses the following process to support the quality of IGC's engagement. Our quality management system aligns with the requirements of ISO/IEC 17025 and ISO/IEC 17020. In addition to areas regulated by these standards, the quality management system includes processes, checklists, and procedures valuable in meeting customer and regulatory requirements. The quality management system is documented through procedures, policies, guidelines, checklists, test plans, and work instructions from which records are established and maintained to demonstrate the conformance of products to specified requirements. A key component to this system is the process of monitoring and tracking of non-conformance in all areas which is

conducted throughout the testing process and continues once a certification is issued.

The BMM Process

BMM has a well-documented process in place to ensure the accuracy and effectiveness of technical standards and test scripts. A brief overview includes:

- Engineering Fault Reporting
- Engineering Management Project Reviews
- Independent Technical Reviews
- Administrative Quality Assurance Reviews
- Technical Compliance Reviews
- Quality Process Monitoring/Internal Audit
- Management Reviews

Engineering Fault Reporting

During testing, any areas of non-conformance or concern are reported through the use of a DIRT (Defective or Imperfections Reported during Testing) report. Test engineers will report what problem exists, how to reproduce the problem, and in the case of a non-conformance, what standard the product under test fails against. All non-conformance DIRTs are discussed with the Group Manager or Project Leader for verification. Should questions remain, the DIRT will be brought to the attention of Technical Compliance and/or technical management for further review. The inclusion of Technical Compliance on unresolved DIRTs provides a level of independent review and avoidance of any conflicts of interest. This also allows for Technical Compliance to communicate with the regulator should direction be needed on intent of any requirement.

Engineering Management Project Reviews

Once testing has been completed, the Group Manager will perform a technical and administrative review of the project. This Group Manager will review the project folder to ensure that all testing has been completed and will verify that all findings are documented, and the testing recommendation is appropriate given the testing results. DIRTs are reviewed to ensure all incidents have been categorized appropriately and resolved. Group Managers will also conduct in-depth reviews of the testing performed in approximately 1 in every 10 projects completed. Should the in-depth review be conducted using engineering staff, the review must be conducted by staff other than the tester who performed the work.

Independent Technical Reviews

Following the recommendation and report writing for a project, the report and the project will be independently reviewed through two separate review processes which run consecutively. During this review, technical staff other than those who performed the testing will review the recommendation report and the project for technical and grammatical correctness. This will include the verification of unique identification codes

for software (signatures), math verification, modifications, and product functionality.

Administrative Quality Assurance Reviews

Administrative staff will review all recommendation reports for format, grammatical correctness, and content.

Technical Compliance Reviews

Prior to issuing a recommendation letter, a Technical Compliance review will be conducted on all projects where the technology is being tested for the first time or when the technology is new to a jurisdiction. The entire project will be reviewed to ensure that the appropriate testing has been completed, DIRTs reviewed to ensure proper categorization given jurisdictional requirements, and reports reviewed for technical accuracy, appropriate standards utilized, and any jurisdictional reporting requirements met. In jurisdictions where the regulatory approval is necessary to issue a report, Technical Compliance will coordinate the regulatory review process. Technical Compliance may also conduct a post implementation review of projects wherein a full review or all testing, testing results, DIRTs, and recommendation reports will also be completed.

Quality Process Monitoring/Internal Audit

The Quality department will be responsible for the monitoring, auditing, and reporting of BMM's ISO accredited policies and procedures. Throughout the testing, review, and post recommendation cycle all areas of internal or external non-conformity will be reported to the Quality department and entered in to BMM's Issue Management Register (IMR). The IMR will track all reported issues by description, source, date and time. If action is required, root cause analysis, and action necessary to resolve the issue will be conducted. The IMR will be used to detect trends in quality and efficiency including manufacturing and regulatory client complaints, revocations, accuracy, and testing procedures and checklists. Reviews of issues documented in the IMR will be conducted on a regular basis with key stakeholders within the organization.

Management Reviews

BMM takes care to ensure the proper checks and balances are in place by managing the IMR incident and any other information regarding the performance, quality, and effectiveness if worked performed across multiple departments. Other than executive management, managers of Technical Compliance, Service Delivery, and Quality will be involved in management reviews of the information collected as part of the Quality Management System.

A key performance indicator that is routinely monitored by the management teams is the quality of BMM testing and certifications. All aforementioned areas factor into BMM's quality including external incidents, internal incident, and revocations.

For clarity, an external incident can include minor grammatical errors in reports to a

critical error in testing. An internal incident could again be a minor error with a report to an incorrect testing procedure which is caught prior to the issuance of a report. Revocations include a certification which has been required to be removed from the field due a major non-compliance issue or a significant functional failure.

2.4.3 Experience

- 2.4.3.1 Provide a comprehensive list of independent technical standards that Respondent has independently developed and would anticipate using to perform Certification Testing in compliance with Indiana laws (specifically 68 IAC 2-6 and 68 IAC 2-6.5) and the Scope of Work section of this RFP. Include complete copies of at least two (2) such technical standards.

BMM Response: BMM currently applies our technical standards outlined here to support IGC. For over 41 years, regulators have consistently sought out and used BMM's expertise and experience to aid in advising and drafting the necessary standards and requirements for effective regulation of the gaming market. Generally, most regulatory jurisdictions do not have the in-house resources with the necessary capabilities to maintain specialized compliance and testing expertise. Accordingly, most regulatory authorities utilize outside experts, such as BMM to assist in meeting the requirements of ensuring that only certified products reach the market and are operated in a manner to ensure integrity.

All jurisdictions in North America utilize a set of minimum requirements, or technical standards, which gaming equipment must adhere to in order to be deemed allowable for public consumption. These standards can be very comprehensive or simple; however, all are intended to ensure the integrity and accountability of the gaming equipment.

In most cases jurisdictions have adopted their own set of standards. Upon reviewing all of the available standards in North America, it can be estimated that 95% of all standards are effectively equivalent. All regulatory standards are a variation of existing standards, such as Nevada and New Jersey as well as those standards offered by Gaming Laboratories International (GLI). The GLI standards themselves are a consolidation of many standards around the world including Nevada and New Jersey and can be considered the industry standard in North America.

Due to the commonality among available standards in North America, as well those found globally, BMM does not believe that developing additional standards to address thoroughly covered requirements is necessary or appropriate for a testing laboratory. BMM has a long history of assisting regulatory bodies in the development of their own standards and recommends that any regulatory body adopt their own standards while making every attempt to use industry common standards. In the absence of a regulatory

framework that permits for such adoption or a regulatory desire to do so, BMM recommends that existing industry accepted standards be utilized.

For Indiana, BMM will continue to perform certification testing utilizing the appropriate GLI or Nevada Gaming Control Board standards for core testing currently in use. An Indiana GAP Checklist and GLI standards have been included as **Appendix 13 (CONFIDENTIAL)**.

- 2.4.3.2 Provide a minimum of three (3) examples to demonstrate Respondent's ability to report/communicate results of Certification Testing to a regulatory agency. Please include a list of all regulatory agencies for whom the Respondent has completed such reports since January 1, 2017.

BMM Response: We understand the value a group such as the IGC brings to the overall management and control in the gaming industry and the accountability to commitment of Indiana constituents to provide a regulated and fair gaming environment.

Our engagement model steps can be summarized as:

- Meet to review requirements
- Provide status updates
- Create evaluation reports
- Provide project close out
- Ensure follow up

We will engage with IGC to customize the approach based on the existing processes and procedures of IGC. We anticipate regular communication in various forms such as in-person meetings, conference calls, memos, e-mails, training, reporting, consulting, etc.

BMM will provide report findings before moving towards completing the Test Reports Result document. We are interested in working with IGC to tailor our reports and methods of communication to fit the requirements of the established policies and procedures.

Although this RFP is specifically addressing United States agencies that have commercial gaming, BMM notes that we have been accredited in more than 440 other gaming jurisdictions globally not encompassed in this list above. We believe this speaks to our reach throughout the world as a trusted testing services provider.

- Software Report
- Client Advisory Report
- Hardware Report

Please refer to **Appendix 14 (CONFIDENTIAL)** for a copy of regulatory agencies that we've provided reports for since January 1, 2017, and to **Appendix 15 (NON-CONFIDENTIAL)** for sample reports currently used.

- 2.4.3.3 Provide a minimum of three (3) examples to demonstrate Respondent's ability to independently develop specific test scripts in order to determine whether an item or technology comports with technical standards used by the Respondent. Include complete copies of each example test script.

BMM Response: We will continue to follow the existing process for successfully developing specific test scripts for IGC. BMM's experience with generating and applying test scripts and test plans begins with creating a checklist with every new jurisdiction to ensure we have captured the state law requirements. The detailed checklists are part of our in-depth analysis process of requirements, laws, technical standards, and internal controls. After the checklist and analysis has been completed, we will release a technical review, compliance review, and quality review, before we release the test plan for use.

As specific examples for Nevada, our process included:

- A. Supplying test scripts for approval to Nevada
- B. Nevada reviewed and ensured they were in compliance
- C. Nevada provided approval
- D. BMM released test scripts for use.

The items identified in this RFP are included within the test scripts by the notion that we are satisfying compliancy of the jurisdiction, which in the example provided is Nevada.

Test script samples include:

- A cabinet checklist and methodology
- A mains and security checklist and methodology
- RNG evaluation checklist and methodology
- System checklist and methodology.
- Sports Wagering checklist

Specific Test Script Examples

The information provided for this section is classified as CONFIDENTIAL. The following test script examples are provided in **Appendix 16 (CONFIDENTIAL)**.

- 2.4.3.4 Provide evidence of the Respondent's ability to test and certify items or technologies for compliance with

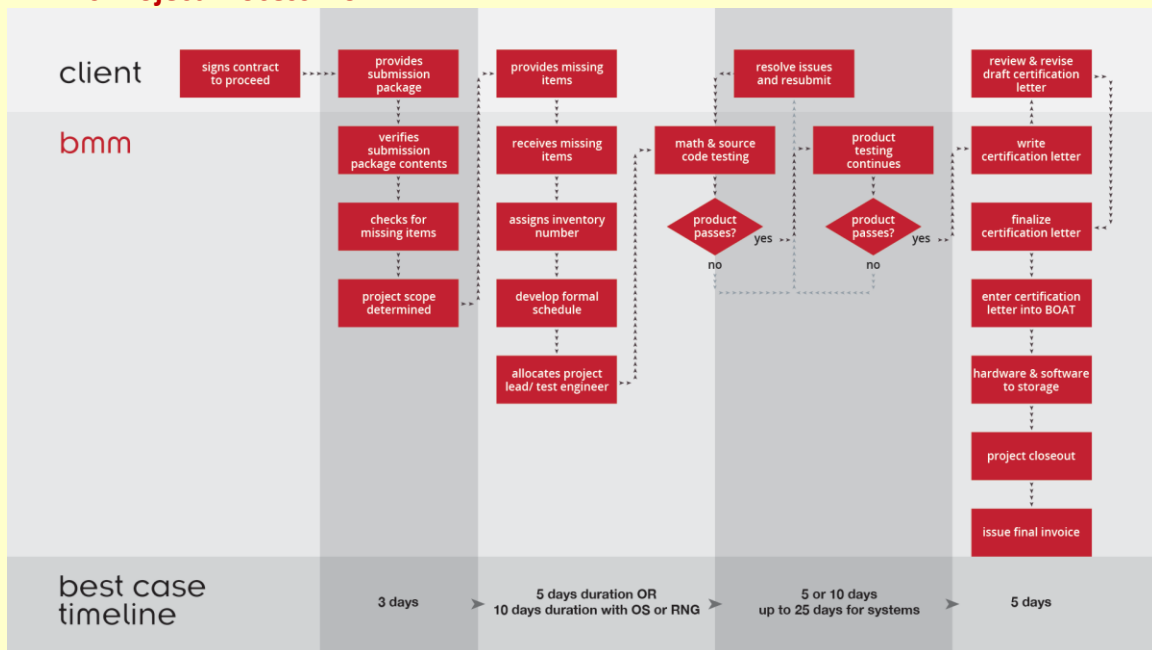
interoperability standards/protocols adopted by the Gaming Standards Association (GSA).

BMM Response: BMM affirms our commitment to IGC that we will test products comprehensively, accurately, and provide consistent certification testing pursuant to and in accordance with the rules and regulations set forth by IGC. We will persist in upholding our capabilities to retain up-to-date technical standards and test scripts for any and all items and technologies requiring certification testing for compliance to the rules, regulations, and industry accepted standards adopted and utilized by IGC.

IGC will have full access to all BMM test scripts, and we will fully comply with any and all requests from IGC for explanation or training on these test scripts, processes and procedures. Based on BMM's ISO accredited lab to 17020, 17025, and 17065, we continuously measure our effectiveness and will continue to do so in any manner adopted by IGC going forward.

BMM maintains a commitment to complete First Pass Testing (FPT) in a timely manner. FPT means the product passes on the first test iteration, while still maintaining the comprehensive and accurate testing methods. Our typical process flow and time frames for the testing and certification of gaming equipment can be seen in the following diagram. Over the past year the average timeframe for the testing and certification of gaming equipment is approximately 20 calendar days.

BMM's Project Process Flow



BMM is fully accredited to test GSA protocols and has been actively involved in all committees related to protocols, since the very early days of GSA.

Please see **Appendix 10** for copies of our ISO accreditation certificates.

- 2.4.3.5 Provide evidence of the Respondent's experience with and ability to conduct: (1) source code analysis/testing, and (2) ongoing output-based total game transaction review testing. Please include a brief statement explaining Respondent's views about the circumstances under which each type of testing is most appropriate and whether Respondent has any current internal policies and/or practices relating to same.

BMM Response: BMM will continue to provide source code analysis/testing and ongoing output-based total game transaction review testing services to IGC. Please find our response in two sections with a summary at the end.

BMM performs a source code review; it can be either a full analysis for new products, or a comparison to previously submitted software for resubmission, for each and every submission. In addition, we perform software verification, for any and all software submitted to BMM.

Considering each respondent's tests practices are confidential and its own intellectual property, our use of an appropriate test type is directed by the policies and procedures provided in **Appendix 12 (CONFIDENTIAL)**.

Section 1: BMM SOURCE CODE ANALYSIS AND TESTING

BMM is required in all jurisdictions to perform a source code review; these processes, procedures and checklist have been audited and verified by A2LA to the ISO 17020 testing practices. In addition, BMM has been authorized and source code evaluations are accepted by certain government agencies in North America, who also have their own gaming test labs, as they do not have the level of expertise necessary to fulfill these requirements directly.

The BMM engineers who perform these tasks must be qualified, educated, and experienced software engineers and programmers, who also have broad understanding technologies, some unique to the gaming industry.

Below is a detailed and complete process test plan for source code review.

A. Preparation for Source Code Review

To complete source code verification process, in a perfect scenario, we will need the following information before the test begins:

- Compiler tools which are normally supplied by the manufacturer

If such tools are not supplied, we will have to use any editor that reads the file format and displays it in a readable form which extends the process of verification due to the fact that it is harder to follow the class and function definitions.

- Road Map of source code logic and how all classes or functions connect to each other.

BMM's first objective is to make sure that the compiler environment is working properly. To do that we build the project and generate a SHA1 signature which then is compared to the one on the game considering the fact that the source code we received was the one that generated the executable file or the binary file. In some cases, this may not apply because the compiler adds information that changes the signature. Those cases are rare but yet still possible.

B. Begin Source Code Review

RANDOM NUMBER GENERATOR (RNG)

Verifying the implementation of the RNG is essential to testing game play fairness and statistical randomness. Part of evaluating the RNG includes reviewing the implementation of the RNG into the source code and verifying the proper usage of the RNG algorithm including:

- The draw RNG algorithm is capable of generating numbers or values that are scaled accurately for the system design.
- The method of generating these numbers or values is unbiased and unpredictable.
- The RNG itself is implemented into the system source code properly.
- The RNG program does not contain any malicious code that may significantly affect the outcome of the RNG.

Verification of Game Result Determination

In order to make sure that there are no hook or modification of the outcome, we have to follow the game process from when the Start button is pressed to the time that the game result is displayed, and the credit meters changed. This is done by following the functions and states as they are called.

Primary Game Elements

Review of the reel strips indexing to verify that the reel strip and the outcome index match the symbol on the screen. Also, in cases when a different strip is selected because of a denomination change, we have to make sure that the right strip is being selected and used during game play.

Bonus Feature Element

We need to make sure that the Bonus outcome is fully random and is an extension of the current game outcome not used as a separate game. Here we also look and make sure that the Bonus works as specified by the game description and the documentation supplied by the manufacturer.

Progressive Jackpot Element

If applicable, we review the way the progressive is handled to ensure that the source code implementation reflects the rules of the game.

Debug Code

Verify that all debug code or “Easter Eggs” left by the engineers are excluded from the final game release version. This process is necessary to make sure that there is no chance of cheating the game because of left over debug code or receiving a surprise result if something was unintentionally left in the code.

Critical Memory

The following components are reviewed in this section:

- Level of redundancy
- Verification of content - We make sure that all meters that are supported in the game are part of the critical memory and are correctly used, and their redundancy is reliable.
- Last game recall
- Current credits
- EMG configuration
- Information pertaining to the current game in progress
- RNG seed

Critical Memory Maintenance

Ensure the critical memory is updated properly with fault tolerant methodology. There is a check for successful memory update; check for methods that cater for disruption of memory update process and make sure that the process functions properly.

Detection of Corrupted Memory

Ensure that the memory is verified via means of signatures after each significant event.

Critical Memory Recovery

Review the function which handles the critical memory recovery and make sure that in case of a validity check the software is able to recover the information from a backup device or locks up the game and enters an unrecoverable memory corruption state.

Data Partitions

Verify that all information related to the specific machine does not share a storage device with the game or system.

Protocol

If there is a specific protocol implemented, we verify that the protocol works according to its specification.

Redundant or Unfair Code

After the most significant parts of the game source code are confirmed, we look for cheat code implementation and for code that does not belong to the game due to it not being used. Redundant code is typically any code that has a function not being called from anywhere and is identified as unlikely to ever be used.

C. Description of the Review Process

As you can see from point B, the review process includes verification of the most significant parts of the operating system and the game. In order to make sure that it all works properly, we review function calls and particular function to verify the integrity of the source code and make sure that there are no cheats or security issues. As things are followed, we document the logic in which function calls work and the most significant functions where the actual processing is completed. If there is a process in question, it is closely investigated, and then particular tests are performed on the physical game to make sure that the code does work as it is intended to and does not cause problems or security vulnerability.

D. Source Code Resubmission

In case of resubmission, the manufacturer needs to submit a software modification list. The process of verifying source code when resubmitted will be very close to the process for new submission except that during resubmission, the new source code is compared to the originally approved version by using Beyond Compare. We confirm changes made are only related to the modification list submitted by the manufacturer. If we find anything that is not in the list, we look closely into the functionality and submit questions to the manufacturer for an explanation.

Section 2: ONGOING OUTPUT-BASED TOTAL GAME TRANSACTION REVIEW TESTING

This statement could be read in two separate ways, the first being: pretesting the full cycle of the games pay table whether through emulation or auto play, verifying all the pays match the pay table and the game performs at an acceptable volatility level. The second being: after a game is live in the field, performing a volatility analysis of live game play to ensure the game is performing to the actual RTP stated by the manufacturer.

To ensure we answer accurately, we will cover both.

Game emulation is a standard form of BMM's testing practices; this is always required in any game submission. After the math and source code are reviewed, where the math is confirmed with BMM's proprietary Pay'n'Play tool, the game is functionally tested. If the manufacturer supplied PAR sheets are not accurate there is a resubmission, until verified to be accurate and playing as designed.

Verifying PAR sheets for compliance to the requirements of the jurisdiction includes an independent evaluation of the math model and confirming the math implementation into the game. This includes reel mapping, pay table verification, decks of cards implementation including their shuffle algorithm, and bonus features. Once the PAR sheets match, the game is functionally tested to ensure the math has been accurately implemented (programmed) into the game accurately. Depending on the number of pay tables submitted, an appropriate number of percentages will be fully tested to verify each win is awarded accurately according to the pay table. BMM completes a thorough check of the balance of pay tables, hitting all top awards, and at least one of each combination to ensure the game pays as designed.

The concept of verifying live game data to analyze the game's actual volatility in the field is a requirement in many jurisdictions. Some jurisdictions require this to be reported on a monthly, quarterly, or annual basis for any new games installed. Often this is a requirement the operator meets for audit purposes. Other times, there may be a particular game that does not appear to be performing within the parameters of what is expected by the operator or the regulator, so the live verification is often done on a case-by-case basis.

BMM performs onsite inspections worldwide. Examples of our field inspection services include, but are not limited to, pre-opening floor audits; and software, equipment, and system verifications.

We can make our entire field service engineering team available to IGC to provide onsite testing services through our ISO 17020 accredited program. A field inspection project begins with preparation of an inventory of items to be inspected. The inspectors then verify components such as installed software, and gaming and peripheral devices to confirm that the components are all approved, installed, and configured per the jurisdictional requirements. If requested, our inspectors seal and secure any appropriate components to ensure proof of tampering visibility for the appropriate regulatory or operational personnel.

At project completion, a BMM Field Inspection report is issued detailing our findings and, where appropriate, certifies compliance with the regulatory requirements.

There are certain North American jurisdictions where this is required to be done by independent test labs annually. BMM has been contracted on many occasions to do this work and believes strongly this is a good practice in regulated markets.

To perform this type of analysis, which is done by qualified math teams, a reverse analysis of the PAR sheets, factored into the actual game cycle (number of games played), is conducted. The mathematical formula is as follows:

$$\text{Volatility calculation} = z * \sqrt{(\sum P_r(x) * x^2) * RTP^2}$$

Where:

$P_r(x)$ is the odds of that specific win occurring

x is the winning amount

RTP is the calculated theoretical payback percentage of the game

z is the Z-score used for jurisdictional confidence interval. Industry standard is 95% confidence. The Z-score is a known statistical value.

SUMMARY

BMM supports both verification methods and has the expertise, experience, and skills to continue testing for IGC in either method. When they are used and how they are used, are really dictated by the rules and regulations of the jurisdiction and the type of test required. BMM initially performs a source code review to establish the scope of testing as well as verifies the PAR sheet implementation of the game. Active debug code only provides output regarding errors for forensic evaluation, critical memory failure checking, failure and error handling. In general, meter variables have enough bytes allocated to support the jurisdictional requirement, corrupted memory, and any secondary decisions. These are examples and our source code review; we are not limited to these examples. However, there are cases where functional testing is required as well. Examples include change the error level from a hard tilt to a soft tilt, a bill acceptor full error, or the SAS portion has been modified to support AFTs.

- 2.4.3.6 Describe the company's continuing efforts to maintain current knowledge and understanding of gaming industry trends relevant to Certification Testing and the gaming regulatory environment in general. Include a description of any continuing education and/or professional certification requirements Respondent has put in place for employees who would perform functions under the Scope of Work section of this RFP.

BMM Response: BMM is a Global Partner to the International Software Testing Qualifications Board (ISTQB). ISTQB is the world's most successful scheme for certifying software testers and has administered over 785,000 exams and issued over 570,000 certifications in over 120 countries worldwide. This prestigious partnership recognizes BMM for its demonstrated commitment to software testing training and qualifications. As a global partner, BMM has achieved 1000 certification points relative to the minimum 58 points, required to achieve this status.

BMM is proud of our over 41 years of dedication to integrity, innovation, and quality within the global gaming industry. We showcase our commitment through supporting numerous professional organizations. BMM partners with AGA to enhance our presence by working together in a collaborative effort on research, white papers, and educational forums. Please review **Appendix 17** for an example from our published white papers.

Furthermore, BMM takes a proactive approach to keep ahead of industry trends, technology solutions, and challenges within the market. Being actively involved in various associations helps ensure BMM is aware of the ever-evolving progression within the industry and educates stakeholders on regulatory and technical challenges. Through attendance at industry conferences, BMM experts participate in panels on topics such as interactive gaming, cyber security, and sports betting.

BMM holds memberships in or participates in the following associations:

- American Gaming Association (AGA)
- World Lottery Association (WLA)
- International Association of Gaming Regulators (IAGRA)
- North America Gaming Regulators Association (NAGRA)
- Gaming Standards Associations (GSA)
- Australasian Gaming Machine Manufacturers Association (AGMMA)
- Australian Gaming Council (AGC)
- Casino Association of South Africa (CASA)
- Latin American Gaming Association (LAGA)
- Minnesota Indian Gaming Association (MIGA)
- Oklahoma Tribal Gaming Regulators Association (OTGRA)
- California Native Indian Gaming Association (CNIGA)
- National Tribal Gaming Commissioners and Regulators (NTGCR)

2.4.4 Resources

- 2.4.4.1 Describe the facilities and equipment that will be utilized and/or available in the performance of tasks for the IGC.

BMM Response: In 2001, BMM opened our first office in the North America in Las Vegas, Nevada which is now our global company headquarters. Our Las Vegas office will be the principal place of business for any services provided to IGC.

BMM focuses our efforts on providing worldwide coverage for the fast-growing regulated gaming markets. We hold representation in 15 locations globally, servicing approximately 475 separate gaming jurisdictions and employing a staff of approximately 520.

BMM's Global Map

Global oversight is conducted by BMM International headed by BMM's Global CEO, Martin Storm. BMM International provides global services to BMM's business regions and our local entities in the areas of sales, human resources, finance, licensing, and operations. Our regional operations are separated into three specific regions, Australia/Asia/South Africa, North America, and Europe/South America. The regions are managed by three key BMM executives along with regional and local managers for Operations, Sales, Service Delivery, Technical Compliance, and Quality Management.

BMM services in the United States are delivered in our state-of-the-art testing facility located in Las Vegas, Nevada. BMM expanded our Global HQ in 2014 adding an additional 10,000 square feet of space making our total headquarters space approximately 35,000 square feet.

Below are pictures of our Las Vegas facility, including our test lab and training area.

BMM's North America Office - Main Entrance



BMM's North America Office - Partial BMM Lab



BMM's North America Office - BMM Training Room

Physical access to BMM facilities is controlled by a badge system and personal identification. Employee badges allow them to pass through authorized entry points within the facilities. Guests must enter the building through the main entrance and be cleared by a BMM employee. They are issued guest badges (that must be visible at all times) and are required to sign in and out upon entry and exit of the premises.

Only IT personnel and their authorized guests may gain entry to server rooms and wiring closets. Guests are escorted and viewable in plain sight always by a member of IT staff. Only IT personnel are permitted to directly log in to servers and network equipment (switches, routers, hubs and the like) unless specifically approved by the IT Manager or System Administrator.

Security and IT Policy Auditing

BMM IT performs audits of our information systems, networks, and associated components to ensure compliance with established policies and security measures. These audits are performed randomly several times a year to preserve the integrity. Audits may include, or result in, the access to any or all computing devices, network and workstation accounts, e-mail accounts, company information, and various physical locations of BMM-controlled areas. This auditing may include network monitoring and traffic analysis.

If BMM does not control the network in a location to be audited (for example, in cases where there is a BMM lab inside a client facility) and/or Internet service is provided via a second or third party, these parties are required to approve scanning in writing if scanning is to occur outside of the BMM's LAN. By signing this agreement, all involved

parties acknowledge that they authorize BMM internal or external auditing staff to use their service networks as a gateway to conduct these tests during the dates and times specified.

Network performance and/or availability may be affected by the network scanning. BMM releases authorized auditing personnel of all liability for damages that may arise from network availability restrictions caused by the network scanning, unless such damages are the result of those designees' gross negligence or intentional misconduct.

Isolation Labs

The BMM Las Vegas campus is equipped with two isolation labs. This is important for all investigations that we perform to ensure the integrity of the investigation is always preserved. The labs are equipped with swipe card access for only those employees directly involved with the investigation. Video surveillance is also used at the entrances of these labs.

Although BMM has maintained ISO accreditation globally in some form for many years, BMM North America itself is ISO/IEC 17020, 17025 IT and 17065 accredited. We are reviewed bi-annually and have maintained this accreditation for the last 9 years.

Service Delivery IT Closet

BMM Las Vegas maintains, a separate, secure IT closet specifically for the housing and operation of online monitoring, cashless wagering, bonusing, and progressive systems. We maintain multiple versions of every major online monitoring and cashless wagering system utilized across the Americas to ensure the ability to provide testing services on the systems and interoperability testing between the systems and the VGTs. This includes interoperability testing of VGTs with central management systems. BMM invested heavily in our IT infrastructure allowing all gaming terminals in our laboratories to be dynamically assigned to communicate with any backend system maintained at BMM.

Interoperability Laboratory

BMM maintains a separate interoperability laboratory in Las Vegas. This laboratory isolates terminals under test from other laboratories to ensure a consistent uninterrupted and stable environment for interoperability and system testing.

EQUIPMENT

BMM utilizes a variety of hardware and software testing equipment. Below is an overview of our most commonly utilized testing equipment.

BMM Signatures is a Secure Hash Algorithm for computing a condensed representation of a message or data file such as a SHA-1, SHA-256, SHA-512, MD5, CRC16, CRC32, Checksum, BMMCK, HMAC-SHA-1 and GAT signature.

BMM EGMEdit is a user friendly, windows-based editor for the BMM EGMEdit file format. The EGMEdit format stores information on all variations and all “Game Sets” (Base game, Free Games, etc.) in a single file.

BMM Play’n’Pay software utilizes the information stored in the EGMEdit files to accurately perform calculations, perform simulations, and create combination tests for reel-based games. Play’n’Pay allows for specialized modifications for particular game specific features and bonuses.

BMM’s RNG Tester software allows manufacturer-specific RNG details to be utilized to perform various statistical tests with or without replacement, to specify different ranges of RNG outcomes, and to specify different sample sizes. These tests include: Chi-squared, Simple Number Frequency, Correlation tests, Run, Gap, Birthday Spacing, Coupon Collector, and Die Hard suite of tests.

BMM BingoCalc software allows for efficient and accurate calculations of bingo games. BingoCalc allows for specialized modifications for particular game specific features and bonuses.

BMM’s VPCalc software allows for efficient calculations of video poker games.

BMM’s BlackjackCalc software allows for efficient calculations of video poker games.

BMM Keno Test program provides accurate probabilities of winning keno game outcomes.

Kobetron 3000 and 4000 are gaming investigators used to generate 4- or 8-digit signatures to verify software by supplying the user with a distinct signature for the device installed. All devices compatible with the unit will have an adaptor that must be installed in order to use the 3000. The 4000 also has the capability to produce SHAW-1 signature.

Forensic Card Reader is a read-only unit used for forensic acquisition of information found on multimedia and memory cards. The read-write unit is included to provide the ability to write to memory cards for testing or validation.

EMP-21 was the world’s first universal device programmer to use both USB and Parallel Port interfaces. With over 6,600 devices supported and Windows-based EMPWin software, the EMP-21 is a versatile and easy to use programmer. This translates to cleaner and more manageable waveforms allowing us to blank check, erase, program, verify, or any combination of these functions with push-button ease.

Fluke Multimeter is a hand-held device used to measure voltage, current, and resistance. It can be used to troubleshoot electrical problems in a wide array of

industrial applications, power supplies, and wiring systems.

Fluke 196C Scopemeter is a high resolution, monochrome or color screen that provides an exceptional view of complex waveforms. The unit has dual-channel, 100MHz bandwidth and gets up to 1.5 GS/s real-time sampling per input (27,500 points per input record length with the Scope Record mode). Automatic triggering allows selection of a full range of manual triggering modes plus external triggering.

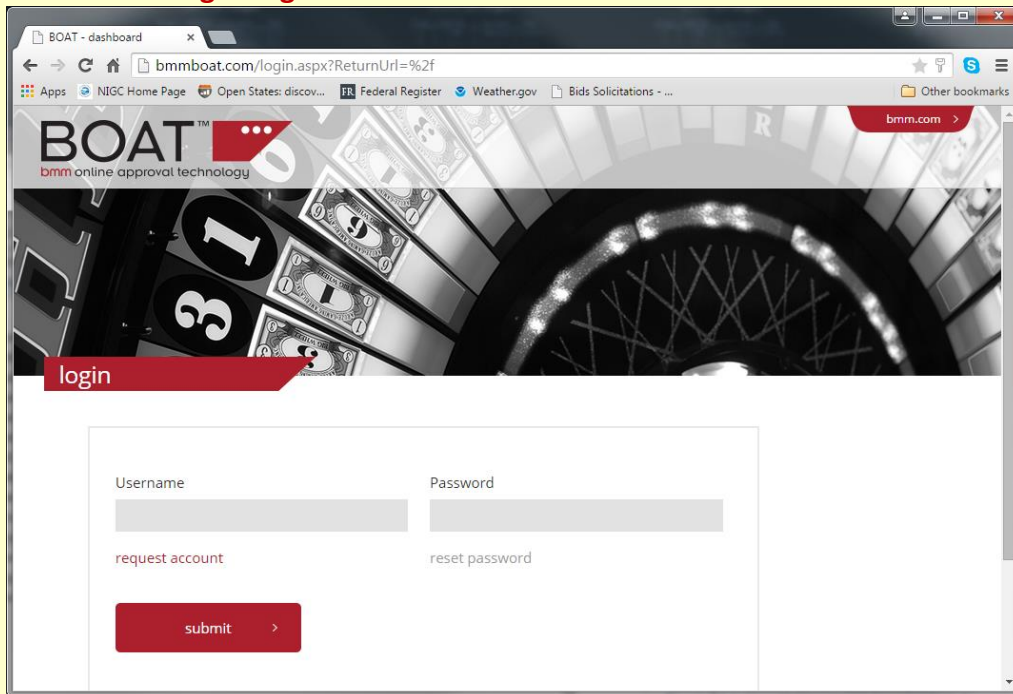
Variac Transformer or a "variable auto-transformer" can act like a step-up transformer or step-down transformer with the ability to adjust output voltage.

- 2.4.4.2 Demonstrate Respondent's ability to ensure that it provides the IGC with Certification Testing results/reports *only* for items and technologies specifically requested by the IGC and/or a Casino Licensee for use at an Indiana casino or Sports Wagering Operator for use within the State of Indiana

BMM Response: We currently uses our BOAT technology to deliver testing results to IGC. BMM's Online Approval Technology (BOAT), available 24/7, is an electronic library of documentation maintained for each submission. As a matter of an internal operating policy, BMM posts the results of testing within 48 hours of the last step of the submission process. At that point, the certification report is issued, in the required format, to the regulatory body for approval or rejection the product. In the event BMM discovers or is made aware of a defect in a product, it immediately confirms the findings and then notifies each jurisdiction for which the product was tested. BOAT also provides regulators with access to manufacturer issued customer notices that are linked to the specific products in BOAT.

BOAT records are maintained in a secure protocol, which requires user name and password to access, enter, and modify any records. This is based on different access levels internally within BMM. Outside access is strictly viewer based and cannot be modified. Any physical documentation associated with each submission is maintained in a secure manner. This area is accessible only by authorized personnel, requires badge swipe entry, and is monitored 24/7 by closed-circuit cameras (CCTV) inside and outside the storage area. Only the Project Office Administrator and the Group Manager of Technical Services have access to this area.

Access to BOAT is obtained from BMM's website at www.bmm.com. The login for BOAT is located in the lower left-hand corner of the main page. Click on the "BMM Login" to enter the BOAT login page.

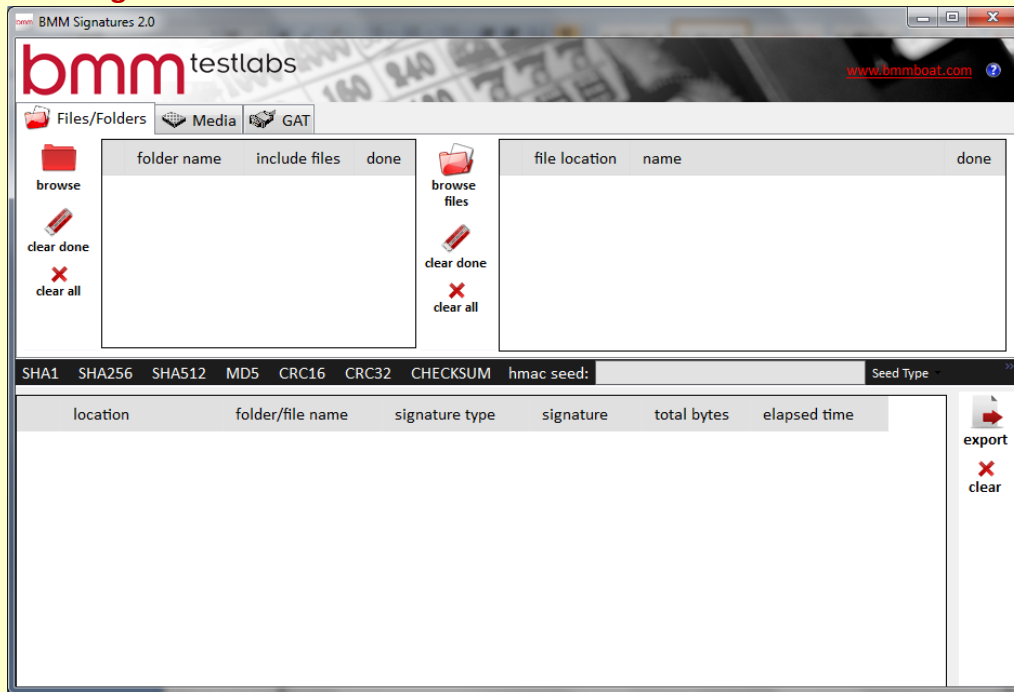
BMM BOAT Login PageA screenshot of a web browser displaying the BMM BOAT login page. The browser's address bar shows the URL "bmmboat.com/login.aspx?ReturnUrl=%2f". The page features a header with the "BOAT" logo and the tagline "bmm online approval technology". Below the header is a large image of a roulette wheel. A red "login" button is positioned above a white login form. The form contains two input fields labeled "Username" and "Password", a "request account" link, a "reset password" link, and a red "submit" button with a right-pointing arrow.

BMM staff members are available to perform a full demonstration of the capabilities of BOAT for IGC. Please contact Derek Smith, VP of Technical Compliance to schedule a demonstration. All demonstrations are conducted via conference call with both parties logged in during the demonstration. Each demonstration will take approximately 30 minutes.

BMM delivers to every jurisdiction, in the required format, the necessary information to verify critical software including any assigned SHA-1. We utilize an internally developed tool, BMM Signatures, which is always provided at no cost to regulators, manufacturers, and operators.

This information is included in the certification reports and is available in hard copy, BMM's online database, or can be made available to any state-controlled database through an API or a format designated by IGC.

BMM Signatures



All physical media and proprietary data associated with any project is properly stored in a designated, secure storage area following IT best practices. This area is only accessible by authorized personnel, requires badge swipe entry, and is monitored 24/7 by close-circuit cameras inside and outside the storage area.

The limited BMM personnel with access to the area include:

- Executive Vice President, Operations
- Director, Service Delivery
- Laboratory Manager
- Quality Manager
- Project Office Assistant

Once the software has been certified and the report issued, the critical software signatures are loaded into BMM's BOAT. BOAT provides direct download access to BMM verification tools as well as contact information for assistance from any BMM office. Once stored in BOAT, any information required will be made available via IGC's database through an API or an acceptable data export process.

Please refer to **Appendix 9** for BMM's BOAT Manual and BMM Signatures User Manual.

- 2.4.4.3 Demonstrate Respondent's ability to develop and maintain a perpetual catalog of items and technologies that have been the subject of Certification Testing by Respondent. Include

information on whether and how the database can be designed to: (1) track which items and technologies are ultimately approved by the IGC for use in Indiana; and (2) be securely and remotely accessed by IGC staff and/or other third party licensees (as directed and approved by the IGC). Include details about any measures in place to ensure security of data storage and minimize risk of data loss.

BMM Response: BMM successfully delivers a perpetual catalog to IGC through our BOAT technology. Once the submissions and certification reports are posted to BOAT, a report is issued in the required format to the regulatory body for approval or rejection the product. The reports are available 24/7 providing, regulators with access to advisory notices that are linked to the specific products in BOAT.

The BOAT database is architected to store, and track information based on several key fields including jurisdiction and manufacturer. This structure, coupled with user credentials, ensures that should a member of IGC login into BOAT, all reports pertaining to BMM's review of products ultimately destined for Indiana will be available. This data can also be made available to third-party licensees at the direction of IGC.

All the information provided within BOAT for a jurisdiction is the most current, up-to-date information available for all phases of the product submission process (approved, revoked, withdrawn, obsolete, or pending).

BMM can provide IGC with the capability to receive export data from the BOAT site in Excel .xls and .csv (comma separated value) formats. We can also make the data available through an open API that allows the data to be shared from system to system. BOAT is a complete resource for the following information:

- Submission Status (Approved, Revoked, Obsolete, Withdrawn, or Pending)
- Program Signature Verification
- Downloadable/Printable Certification Test Reports
- Advanced Search Capabilities
- Downloadable/Printable Field Verification Manuals
- Downloadable/Printable Client Service Notifications
- Customized Configurable Login Screens

Security, Remote Access, and Data Protection Functionality:

- User specific single username and password
- Passwords are stored as a SHA1 signature
- User accounts are driven by roles (Jurisdiction, Operator, Manufacturer)
- Website is strictly read-only (internal application is used to add/edit records)
- Data housed remotely in facilities engineered with HVAC environmental systems,

- digital surveillance, stringent security, and conditioned uninterruptible power
- Weekly backups are performed, and then written to the tape backup

Please refer to **Appendix 9** for BMM's BOAT Manual.

- 2.4.4.4 Demonstrate Respondent's ability to independently develop, maintain, and utilize up-to-date technical standards for any and all items and technologies requiring Certification Testing and ultimate IGC approval under 68 IAC 2-6 and 68 IAC 2-6.5.

BMM Response: IGC has experienced BMM's ability to develop, maintain, and utilize our proven technical standards for the past four years.

For over 41 years, regulators have consistently sought out and used BMM's expertise and experience to aid in advising and drafting the necessary standards and requirements for effective regulation of the gaming market. Generally, most regulatory jurisdictions do not have the in-house resources with the necessary capabilities to maintain specialized compliance and testing expertise. Accordingly, most regulatory authorities utilize outside experts, such as BMM to assist in meeting the requirements of ensuring that only certified products reach the market and are operated in a manner to ensure integrity.

BMM was one of the primary authors of the Victorian System Requirements Document (SRD), which is the foundation of the Australian and New Zealand Gaming Machine National Standards, one of the most widely recognized and technically detailed global standards. The standard was created for the requirements of Australian and New Zealand regulated jurisdictions, and the content has been widely used and replicated in the development of other jurisdictional gaming standards, including in the United States.

We are also the primary author in the development of technical standards for the minimum design and operating standards of central monitoring systems (CMS), progressive jackpot systems, cashless systems, play loyalty systems, voucher and coupon redemption devices, and associated equipment. These standards are largely found in the Victorian System Document (VSD).

BMM has continued to expand internationally and within North America providing our expertise in the development of technical standards for new technology. Our staff, such as Travis Foley, Chief Operations Officer and Executive Vice President, Americas, has extensive history in maintenance and development of technical standards. Travis spent over 13 years with the Nevada Gaming Control Board where he was directly involved in the maintenance of technical standards for gaming equipment. As technology evolved over his time with Nevada, he was involved in updating Nevada standards to accommodate technologies that are now common place on the gaming floor such as

community-based gaming. Travis was also involved in the authoring of technical standards for cashless wagering systems, system-based and system-supported gaming, and authored the mobile gaming standards.

Despite our long history in assisting with the development of technical standards and our capability to do so, BMM has chosen not to develop a set of independent BMM technical standards. BMM does not believe that developing additional standards to address thoroughly covered requirements is necessary or appropriate for a testing laboratory.

As stated, BMM has a long history of assisting regulatory bodies in the development of their own standards and recommends that any regulatory body adopt their own standards while making every attempt to use industry common standards. In the absence of a regulatory framework that permits for such adoption or a regulatory desire to do so, BMM recommends that existing industry accepted standards be utilized.

Given our proven track record in assisting regulatory authorities with creating technical standards, BMM is confident that we can assist the Indiana Gaming Commission in maintaining a regulatory framework which reflects a concise understanding of the latest technology and industry best practices.

- 2.4.4.5 Demonstrate Respondent's ability to independently develop, maintain, and utilize up-to-date test scripts to accurately determine whether an item or technology comports with technical standards adopted by the Vendor as well as applicable Indiana laws and regulations.

BMM Response: BMM in North America currently maintains over 397 checklists and methodologies used to accurately determine whether an item or technology comports with various statutes, regulations, compacts, technical standards, or jurisdiction policies in North America. Testing checklists and the accompanying testing methodologies are the keys to determining whether a product is compliant with the applicable requirements. BMM checklists are continuously reviewed internally as well as externally relative to any changes in requirements.

The general testing process at BMM includes several phases. Working with the manufacturing client, BMM identifies a core standard to test products against. For those clients that are active in the Nevada market or in jurisdictions which utilize the Nevada technical standards, BMM performs core testing to the standards of the Nevada Gaming Control Board. For those that do not participate in these markets, the appropriate GLI technical standard are used for core testing. In addition to the core testing, at the request of the client, BMM performs what is referred to as GAP testing (explained below) for each individual jurisdiction for which the client wishes to obtain certification.

Before BMM commences testing for jurisdiction for the first time, our Technical Compliance department reviews the jurisdiction's statutes, regulations, standards, and policies. Upon completion of review, Technical Compliance then creates a testing checklist or GAP checklist covering all necessary tests to be performed over and above the core standards that will be utilized to ensure compliance. Once this checklist is created, it then goes through a technical review process which is carried out by our Service Delivery team to ensure that all requirements are documented. Before being released, the Technical Compliance team may also consult with the jurisdiction to ensure all necessary areas are covered or to clarify the intent of any standard. The checklist is then reviewed and released through our Quality System and published for use internally.

Updates of standards are monitored and reviewed by our Technical Compliance department and all necessary changes to our testing checklists updated accordingly to ensure BMM is testing to the most current standards at all times. Once these changes are made, the checklist is again vetted through our Service Delivery and published internally through our Quality System

BMM monitors the industry for updates to applicable rules and standards using various technologies and communications such as RSS feeds, email distribution lists, and online publications. The most valued and useful source is regular communication with regulators. BMM finds that through regular communications with the jurisdictions we service, we are aware of potential changes. This allows BMM to not only be prepared for the adoption of new rules and standards but allows us to participate in the adoption process.

Please see **Appendix 13 (CONFIDENTIAL)** for test scripts successfully implemented for IGC.

2.4.5 Finance

- 2.4.5.1 Describe the Respondent's method of handling accounts as well as its willingness and ability to directly bill a Supplier Licensee for Certification Testing, as required by contract.

BMM Response: BMM always directly invoices the Supplier and/or Licensee unless otherwise stated and/or requested.

BMM's client engagement process includes sending a quote for testing services to the Supplier Licensee for the amount of testing hours/fees required. The quote provides an estimate for First Pass Testing only, meaning if the product passes on the first test iteration, we ensure that we will be on target with the estimate. However, if any faults are detected and resubmission is necessary, this will likely increase the time/price

necessary to complete evaluation. BMM also provides a Letter of Engagement (LOE) to our clients which covers the following areas:

- Scope of Work
- Fees and Charges
- Commercial Considerations – Copyright, Intellectual Property & Confidentiality
- Equipment and Software
- Insurance
- Indemnity
- Disclaimer
- Invoicing

BMM conducts hourly billing and invoices on a monthly basis. The invoices are sent directly to the client and due 30 days net. The testing is based on the jurisdiction targeted; the jurisdiction is never invoiced for Supplier Licensee work. We work with the Supplier Licensee through signed Non-Disclosure Agreements as well as Letters of Engagement outlining invoicing terms.

2.4.6 Investigation

- 2.4.6.1 Respondent must state/provide its willingness to submit to a full investigation, if selected, of the Respondent and any individual deemed by the IGC to be a key person or substantial owner of the Respondent.

BMM Response: We understand the need for this requirement and BMM is willing to submit to a full investigation, if selected, including any individual deemed by IGC to be a key person or substantial owner of BMM.

Appendices

- Appendix 1** - BMM Organizational Chart (NON-CONFIDENTIAL)
- Appendix 8** - State Gaming Regulatory Agencies (CONFIDENTIAL)
- Appendix 9** - BOAT Manual (CONFIDENTIAL)
- Appendix 10** - ISO Certificates (NON-CONFIDENTIAL)
- Appendix 11** - BMM Team CV's (CONFIDENTIAL)
- Appendix 12** - BMM Policies and Procedures (CONFIDENTIAL)
- Appendix 13** - Indiana GAP to GLI Standards (CONFIDENTIAL)
- Appendix 14** - Regulatory Agencies (CONFIDENTIAL)
- Appendix 15** - Sample Reports (NON-CONFIDENTIAL)
- Appendix 16** - Test Checklist Examples (CONFIDENTIAL)
- Appendix 17** - White Paper (NON-CONFIDENTIAL)