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 or Sports Wagering Operator; (2) gain advance approval from the Executive Director before contracting with or providing services to any Casino Licensee or Sports Wagering Operator; 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.

GLI understands and agrees to promptly disclose this information upon request from the IGC.

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.

GLI confirms we understand and agree to this requirement.

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.

GLI confirms we understand and agree to this requirement.

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.

GLI confirms we meet this requirement. GLI has been providing Certification Testing services in the gaming industry, including in jurisdictions with commercial casinos, since the foundation of our company in 1989.

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.

Yes. Please refer to **Appendix G – List of Jurisdictions with Contracts & Services.**

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.

GLI confirms we understand and agree to this requirement.

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.

GLI's commitment to providing the highest standards of testing and certification to our clients is demonstrated by our operation of 17 fully-accredited testing laboratories worldwide, 9 fully-accredited inspection bodies in the Americas, Europe, Australia, and Africa, and 2 fully-accredited product certification bodies in the USA (New Jersey) and Netherlands.

GLI was the first independent testing laboratory of its kind to retain U.S. and International accreditations for compliance with ISO/IEC 17025, ISO/IEC 17020 and ISO/IEC 17065 standards for technical competence in testing, inspection, and product certification services.

Table 1 presents GLI's global laboratory accreditations. Proof of accreditation for GLI's U.S. laboratories is provided in **Appendix H - ISO Accreditations (U.S.).**

Table 1: GLI Global Laboratory Accreditations

Location	ISO/IEC 17025	ISO/IEC 17020	ISO/IEC 17065	ISO/IEC 27001	Accreditation Body
USA – Colorado	Yes				A2LA
USA – Nevada	Yes				A2LA
USA – New Jersey	Yes	Yes	Yes		A2LA
Argentina	Yes				OAA
Australia - Melbourne	Yes				NATA

	Australia - Adelaide	Yes	Yes			NATA	
	Australia - Sydney	Yes				NATA	
	Austria - Traiskirchen	Yes				Akkreditierung Austria	
	Austria - Graz	Yes	Yes			Akkreditierung Austria	
	Canada	Yes				A2LA	
	Italy - Bologna	Yes	Yes			Accredia	
	Italy - Padova	Yes	Yes			Accredia	
	Macau	Yes				A2LA	
	Netherlands	Yes	Yes	Yes	Yes	RvA	
	South Africa	Yes	Yes			SANAS	
	Spain	Yes				RvA	
	United Kingdom	Yes	Yes			UKAS	

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.

GLI confirms we understand and agree to this requirement.

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.

GLI confirms we understand and agree to this requirement.

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.

GLI confirms we understand and agree to this requirement.

2.4.2 General Information

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

Legal Name: Gaming Laboratories International, LLC
Address: 600 Airport Road, Lakewood, New Jersey 08701
Email: procurement@gaminglabs.com
Phone: 732-942-3999
Fax: 732-719-1475
Year of Establishment: 1989

2.4.2.2 Provide a history of the company.

With Regulators from the Beginning

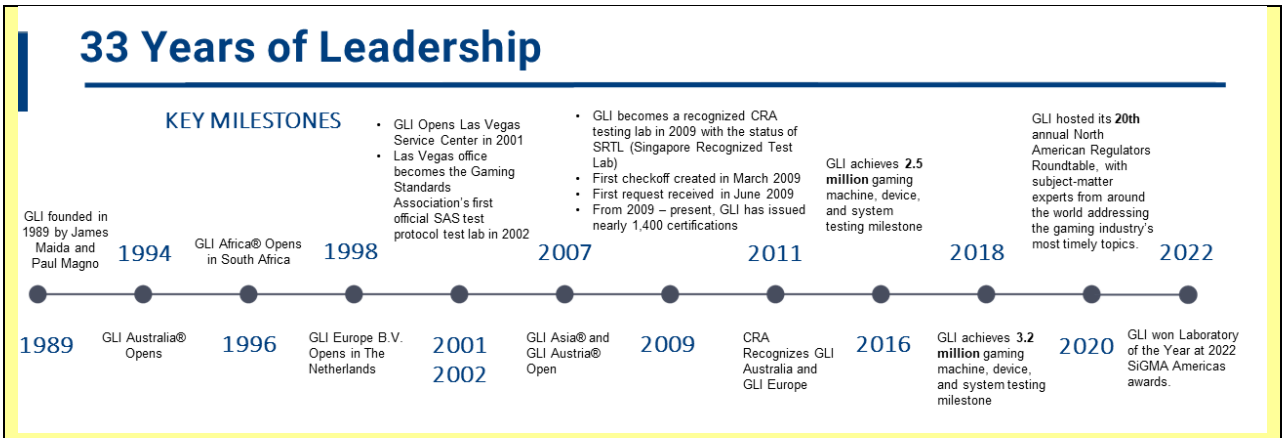
Our history begins in 1989 when James Maida and Paul Magno formed GLI—the first private independent game testing company in the U.S. This same year, GLI signed its first contract with the South Dakota Lottery for video terminal and system testing of the first organized video lottery system in the U.S. And, 33 years later, the South Dakota Lottery has remained a client to this day.

A Storied History of Expansion

As the gaming industry expanded, so did GLI. By the early 1990s, GLI's testing broadened to include casinos, Indian gaming facilities, and riverboat gaming jurisdictions throughout the U.S. GLI supported the first riverboat opening in Dubuque, Iowa in 1992.

Always with a mindset to deliver for our clients, GLI proactively increased staff and testing facilities to ensure more than enough resources were ready to meet the demand of a fast-growing industry. By the mid-90s, GLI had two U.S.-based testing facilities—at GLI's world headquarters in New Jersey and another in Colorado. In addition to our expansion in the U.S., GLI was the first independent test lab to open fully functioning laboratories in Africa, Asia, Australia, and New South Wales. While other labs opened what they called "offices," GLI's labs were fully staffed, accredited facilities, capable of testing any device or system local regulators and suppliers needed to be tested and certified. GLI was the first independent testing laboratory of its kind to retain U.S. and International accreditations for compliance with ISO/IEC 17025, ISO/IEC 17020 and ISO/IEC 17065 standards for technical competence in testing, inspection, and product certification services.

In 2001, GLI opened its third U.S. location—the Las Vegas Service Center, an 18,000 square-foot protocol and systems testing facility. In 2002, the Gaming Standards Association (GSA) designated GLI as the official SAS protocol test laboratory. During the mid-2000s, a second building was added to our NJ headquarters location providing an additional 46,000 square feet of testing space and an engineering night shift to provide extended service to our clients.



Setting Industry Standards

In support of a standards-based approach to business, GLI was the first to write and set lottery and gaming standards which are now considered to be the industry benchmark worldwide. GLI has continuously responded to the industry by investing time and resources to innovate new standards in testing—20 so far—allowing regulators and lotteries to feel confident that they are providing a safe, responsible method of revenue generation for their stakeholders. In 2011, GLI reached a global historical milestone by establishing the industry's first global iGaming regulatory guidelines (GLI-19). Most recently, GLI issued GLI-33: Event Wagering Systems, the world's first event-wagering technical standard developed to ensure the integrity of the dramatically expanding sports betting market.

Evolving Expertise

As testing has evolved over the past 33 years, driven by advances in technology, so has GLI. Today, testing requires better-trained people with more expertise. As GLI grew, our staff became highly-trained, specialized, and experienced. Our full-time skilled professionals possess dedicated, distinct roles including: test engineers, system engineers, network engineers, forensic engineers, field inspectors, mathematicians, technical compliance engineers, quality assurance (QA) specialists, and client services representatives.

Over the years, GLI has gained significant cumulative experience among over 1,400 employees, including industry recognized subject matter experts (SMEs) on a wide range of topics. Regulators and lawmakers worldwide trust GLI and its global staff of experts. Domestically, GLI experts have testified as expert witnesses in front of the California Senate to get Tribal compacts signed, testified in front of the U.S. Senate and U.S. House as an expert witness, and the company provided testimony at the first NIGC Hearing.

Innovating Systems for Greater Productivity

Later, as GLI saw a pain point for suppliers, it created its patented GLI Link® system, allowing devices to be tested against systems over the internet, speeding time to market and dramatically reducing costs.

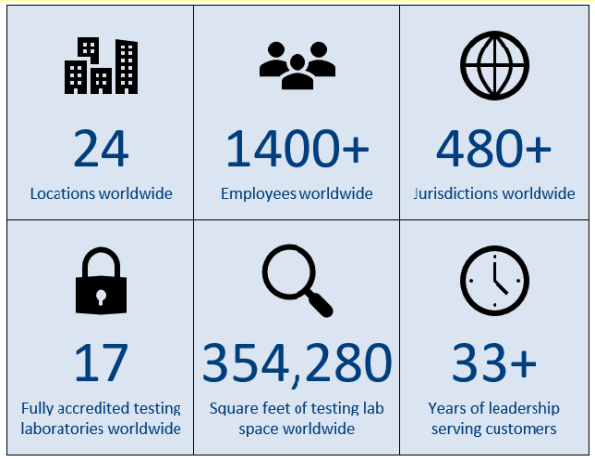
In 2018, GLI became the first test lab to be recognized for using automation in Gaming QA and Compliance testing. GLI's Testing Automation was voted "Best Innovation" in Gaming & Leisure Magazine's "2018 Gaming and Hospitality Industry Awards." Testing Automation was also

named the Gold Award winner for Best Productivity-Enhancement Technology in GGB Magazine's "Gaming and Technology Awards." In 2020, GLI won Casino Journal Top 20 Most Innovative Gaming Technology Award Winner - Remote Test Bed Technology. In 2021, GLI won the silver medal for CMS Testing Automation in the GGB Gaming & Technology Awards.

GLI is able to develop these innovations because it is the only gaming testing laboratory in the world that employs a full-time, dedicated software development team to work on improving testing processes, building greater efficiency into the testing process and to work on solving problems facing GLI's regulatory clients and supplier customers.

Today

GLI has certified 4.5 million gaming and lottery machines, devices and systems for more than 480 regulated gaming jurisdictions. . While there have been many changes in the gaming industry over the years, GLI's consistent leadership and our client centric core values have been a reliable constant which is why **our first customer remains a customer today.** Our legacy is more than history – it's a foundation of excellence you can rely on for insights into the future**.**



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

James R. Maida
President and CEO
Gaming Laboratories International, LLC
600 Airport Road
Lakewood, New Jersey 08701

James R. Maida, Esq.is President and CEO of Gaming Laboratories International (GLI®). He began his gaming industry career in 1985, testing gaming equipment with the New Jersey Division of Gaming Enforcement. In 1989, he and co-founder Paul J. Magno created GLI, as an independent gaming testing and consulting firm. Since then, GLI has grown to a global company with 24 locations with more than 1,400 employees. The company consults and tests land-based, online, and lottery games and systems for more than 46 state agencies, 250 tribal gaming commissions, 480 jurisdictions, and 1,000 equipment suppliers.

Maida is a sought-after speaker and has presented at gaming and technology conferences worldwide, and he has testified as an expert witness in numerous gaming cases on both the federal and state level, including appearances before the U.S. Senate, U.S. House of Representatives, the National Indian Gaming Commission, and multiple state legislative committees.

He has been recognized for his contributions and visionary leadership by multiple organizations. Rutgers School of Law awarded him the Arthur E. Armitage Sr. Distinguished Alumni Award (2013), and he received the New Jersey Ernst and Young Entrepreneur of the Year (2019).

Specific to the gaming industry, he has been named one of the “25 Most Influential Persons in the Gaming Industry” and one of the “Most Influential People in Gaming.” He has also been honored by the Annual Saratoga Institute on Equine, Racing, and Gaming Law for his lifetime achievements, by the Oklahoma Indian Gaming Association with its prestigious Modern-Day Warrior Award, and he has been inducted into the AGA Gaming Hall of Fame and the Mississippi Gaming Hall of Fame.

He is a member of multiple charitable boards, including the Lehigh University Board of Trustees, Rutgers University Foundation Board of Overseers, Monmouth Medical Center Board of Trustees, and he is the trustee of the James and Sharon Maida Foundation, whose charitable contributions have positively impacted communities worldwide.

Paul J. Magno
Executive Vice President
Gaming Laboratories International, LLC
600 Airport Road
Lakewood, New Jersey 08701

As the co-founder and Executive Vice President of GLI, located in Lakewood, New Jersey, Mr. Paul J. Magno draws upon his more than 33 years of gaming industry and professional management experience to lead the company's North American Operations and oversee the world headquarters office.

Mr. Magno began his long and successful career in the gaming industry in 1985 as a Computer Specialist at the New Jersey Division of Gaming Enforcement (DGE). During his tenure with the DGE, Mr. Magno assisted the Sergeant of Investigations on special projects within the electronic games section. Other duties included maintenance of database submissions from the NJ lab and writing computer programs for testing and tracking on all the machines in Atlantic City.

From there, he went on to establish GLI with James Maida in 1989 where he has been responsible for everything from machine testing to personnel and operations management. Mr. Magno began working regularly with the Indiana Gaming Commission in 1995 and continues to work closely with the Commission, as well as other gaming jurisdictions and regulators, to facilitate the testing and implementation of new technologies. He regularly meets with GLI clients located in the eastern half of the United States.

Additionally, Mr. Magno has been a featured speaker at various industry conferences across the country; including co-chairing GLI's annual North American Regulators Roundtable educational and networking events.

His prior work experience includes Electronic Funds Transfer Operator with The Treasurer Incorporated, an ATM network company; and Junior Programmer with B.I.S. Banking Systems.

Mr. Magno is a graduate of Rutgers University, where he obtained a Bachelor of Arts degree in Communications.

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.

GLI employs **over 400 full-time skilled professionals in the U.S.**, and over **1,400 full-time employees globally**.

Table 2 demonstrates the number of employees assigned to each of the related departments, from GLI's U.S. offices alone.

Table 2: GLI Employees (U.S.)

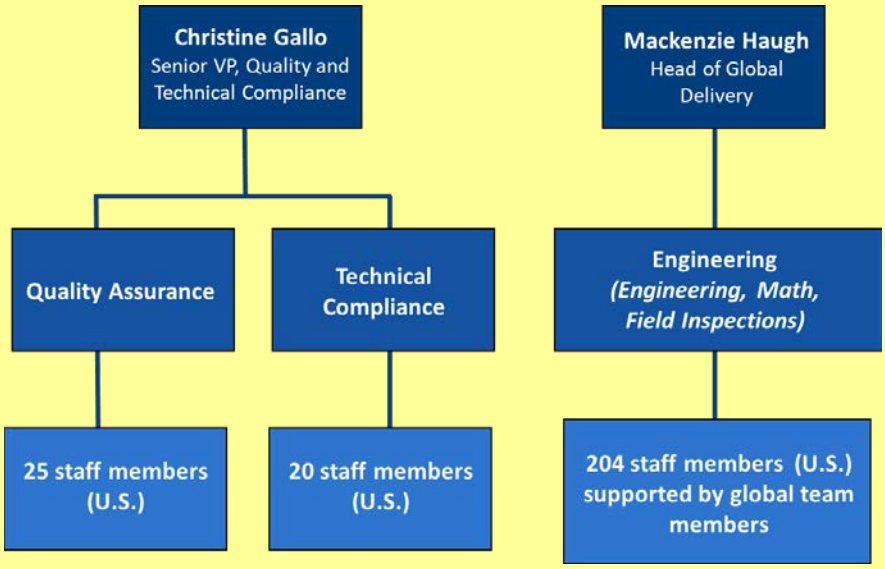
Division/Department	NJ	CO	NV	Total
Accounting	15	0	0	15
Administrative/Executive	4	0	1	5
Technical Compliance	10	6	4	20
Engineering Field Inspections is a subset of Engineering who have been trained and qualified to perform field inspections by Field Inspection Management	63	67	74	204
Math	15	8	4	27
IT/Engineering	0	15	0	15
IT/Software Dev.	20	10	4	34
Legal	7	0	2	9
Marketing	0	0	8	8
Quality Assurance	16	0	8	24
QA - Procurement	7	0	0	7
QA - QMS	0	0	3	3
HR/Training	8	1	0	9
Facilities	3	2	1	6
Client Services	4	3	14	21

Proposed Staff

GLI is pleased to offer the IGC a service delivery team of industry veterans, led by the same individuals who have been managing projects for Indiana since the very beginning – **Mackenzie Haugh, Head of Global Delivery**, and **Christine Gallo, Senior Vice President, Quality & Technical Compliance.**

Figure 1 identifies the organizational structure of GLI's staff who will directly manage or supervise tasks that are associated with this contract.

Figure 1: Lead Management Organization Chart



Our Lead Management will work with teams of highly trained, specialized, and experienced resources to perform compliance testing for the IGC. The following summarizes the tasks they are anticipated to perform. Resumes for select staff members are provided in **Appendix I – Resumes**.

Mackenzie Haugh, Head of Global Delivery

As GLI's Head of Global Delivery, Mackenzie Haugh has overall responsibility for the testing that is performed by GLI for the state of Indiana. He sets testing policy and provides overall direction for the department within the framework provided by the state of Indiana, the Technical Compliance department and senior leadership. Mackenzie has extensive experience working closely with both online and land-based (tribal, state and federal) Regulatory Agencies, gaming Suppliers and Operators to ensure regulatory product compliance and certification. He maintains operational-level communication with both jurisdictional representatives and manufacturers on issues such as deadlines, progression of testing, updates, and general testing questions. He also has overall responsibility for the quality and performance of the U.S. Engineering Department who will be supporting the IGC with certification testing. Additionally, he writes and updates test documentation and procedures used by the engineers.

Engineering

GLI possess resources that include seasoned project managers, mathematicians, hardware and software engineers, compliance engineers, system and communication protocol engineers, and high-tech engineers that are familiar with and can help support what IGC considers critical to business operations. GLI's team knows the operations in the IGC and can deliver a level of service and expertise that cannot be matched by any other testing lab or professional services provider.

GLI's dedicated team of engineers are available on demand to regularly meet with IGC staff. This dedicated time is all part of the GLI experience and offered at **no additional cost to the IGC**. GLI engineers are available to discuss any potential regulatory concerns regarding gaming submissions and provide insight into field issues, or supplier notifications. GLI routinely acts as a liaison between gaming suppliers and the IGC. When a new technology is submitted to the lab, GLI is able to provide an independent assessment of the applicable technical requirements and break down complex concepts into easily manageable discussion points for the IGC. The IGC is then able to use that information to make an informed determination on a supplier's product. Agents in the field also provide support regarding certification reports or software verification assistance. At any point, GLI is available to provide detailed instructions on the verification process of any GLI certified software in the jurisdiction.

Table 3 outlines the positions and number of Quality Assurance personnel available to support this engagement.

Table 3: Engineering & Math Personnel

Title	Number of U.S. Resources	Position Descriptions
Head of Global Delivery	1	Provides direction and leadership for global delivery teams.
Vice President, Engineering	3	Provides direction and leadership for all projects and operations of the Engineering Department.
Engineering Director	7	Provides an advanced level of technical support. Responsible for all the testing performed for and service delivered to the state of Indiana by their teams. The Directors will provide overall direction and leadership for their teams in concert with the Vice President of Engineering.
Engineering Manager	29	Accomplishes objectives by managing staff and evaluating Engineering endeavors. Leads a team comprised of engineers and one or more managers along with their teams. In addition to the responsibility of ensuring the quality

		of the testing performed for the state of Indiana, a Senior Manager will typically be responsible for service delivery for either a single gaming supplier or a collection of suppliers and may be a subject matter expert for one or more disciplines.
Auditor	5	Performs extensive reviews of reports for compliance with all relevant regulatory requirements.
Test Technician	9	Performs field inspection tasks.
Senior Test Engineer	31	Provides an advanced level of technical support related to the testing of electronic gaming devices.
Test Engineer III	20	Tests and analyzes hardware and software of electronic gaming devices to ensure compliance with regulatory standards.
Test Engineer II	27	
Test Engineer I	73	
Engineering Technical Assistant	6	Reviews areas of work performed by Test Engineers to ensure accuracy and quality.
Math Director	1	Provides strategic direction and leadership for all activities, projects, and operations of the Department of Mathematics worldwide. Performs and reviews mathematical modeling and testing in all core areas, develops software applications/suites to increase efficiency and accuracy of mathematical modeling and testing, and updates and reviews departmental policies and procedures to ensure that current methodology is up to modern standards.
Math Manager	1	Accomplishes objectives by managing staff and evaluating Math endeavors.
Senior Math Analyst	5	Provides an advanced level of technical support related to mathematical testing.
Math Analyst III	7	Performs mathematical testing in the core areas of standard game analysis, strategy game analysis, and RNG analysis.
Math Analyst II	3	
Math Analyst I	10	

Christine Gallo, Senior Vice President, Quality & Technical Compliance
Ms. Gallo has been overseeing the Quality Assurance and Technical Compliance teams that have been providing services to the IGC since the inception of gaming in Indiana. It is anticipated that she will continue to provide this oversight to the satisfaction of the IGC. This role is critical as it includes the certification reporting, maintenance of the database of items and technologies certified and maintenance of the online access of the reports for easy access. In addition, this role also includes the oversight of the 24/7 compliance contact team, old and new technology SMEs for rule-writing, training, Indiana gaming law, processes and procedures. In essence, Ms. Gallo will provide the IGC with the tools and expert advisors to support the certification testing and advances in technology outside of the actual testing. In 2002, Ms. Gallo was awarded the ***VIXIO Global Regulatory Award for Chief Compliance Officer of the Year.***

Quality Assurance

The functions of GLI's QA team are separate from the certification testing team. The purpose of this team is to perform independent work product verification of the certification testing (e.g., ensure that the appropriate regulations and test scripts were utilized, the documentation is complete and accurate, the equipment is in compliance with all IGC technical standards, etc.). Once the independent review is successfully completed, this team will prepare a certification report for the IGC. The QA operations are responsible for critical services outlined within the scope of work section of the RFP including:

- Maintaining a comprehensive database of items and technologies certified by GLI or that are easily tracked along with the items submitted to GLI that were not certified.
- Providing the IGC with online access of the certification reports, via a secure communication protocol.
- Maintaining uniform data and data entry processes.
- Providing a mechanism for the IGC to review reports and submission status information within one business day of processing. In fact, QA has made custom process changes for the IGC for the integration into their own system.
- Providing customized reports specific to the IGC needs.
- Providing unique identification codes along with the procedures to validate the unique codes in the field by the IGC field agents.

Table 4 outlines the positions and number of Quality Assurance personnel available to support this engagement.

Table 4: Quality Assurance Personnel

Title	Number of U.S. resources	Position Descriptions
Senior Vice President, Quality and Technical Compliance	1	Oversees and manages Quality Assurance and Technical Compliance Departments. Oversees the activities

			within the QA department to independently monitor the quality of the testing work being conducted for the IGC and has intimate knowledge of the GLI/IGC integrated processes and will continue to monitor and adjust the systems to accommodate IGC requests.	
	Director, Global QMS	1	Provides auditor oversight of the GLI quality management system which is the structure upon which an organization systematically manages the technical, administrative, operational and supporting aspects pertinent to the work it performs.	
	Manager, Quality Assurance	1	Manages staff and evaluates Quality Assurance endeavors. Manages the day-to-day operations in QA to ensure the team is properly staffed, our workflow is efficient, and the data is maintained with integrity. Monitors the critical pain points of the operations to ensure the best quality of testing is performed along with the best quality of the GLI certification reports. Continue to perform these duties to the satisfaction of the IGC.	
	Manager, Quality Systems	1	Supports the Director of Global QMS.	
	Quality Systems Controller	1	Point of Contact for general questions related to the maintenance of the Quality Management Systems.	
	Supervisor, Quality Assurance	3	Supervises quality review of Engineering work. Performs the day-to-day personnel administrative oversight for the QA team. They also mentor, train and develop processes and procedures to accommodate specific requests from GLI customers. The supervisors are responsible for scheduling of work to ensure completion dates are met and GLIAccess® is updated within one business day.	
	Document Review Specialist	1	Oversees work completed throughout the Quality Assurance process.	

Senior Data Entry Operator	1	Enters and edits complex information from a variety of internal and external sources.
Data Entry Operator I	1	
Document Specialist III	3	Reviews Engineering test files for regulatory compliance and compiles certification documents.
Document Specialist II	5	
Document Specialist I	6	

Technical Compliance

GLI invests a significant amount of time and effort into the dedicated Technical Compliance team, the gaming industry's SMEs. A team of this size and skill level is critical to the IGC as they are largely responsible for the services outlined within the scope of work of the RFP, outside of the actual certification testing, including:

- Providing the IGC staff with experts on technical standards, test scripts and certification testing – **free of charge to the IGC**.
- Performing self-monitoring of the internal GLI testing processes to continuously ensure accurate evaluation against the IGC requirements and ability to provide supporting materials to the IGC for effective monitoring.
- Maintaining a team with the skillset and capacity to independently develop and maintain up-to-date technical standards and clearly explain the purpose and impact of the rules to the IGC.
- Providing the team with the skillset and capacity to provide 24/7 regulatory compliance support (our team of SMEs are the actual call recipients, not a third-party call center – this is critical to a state regulatory agency as most casino operations are 24/7).
- Developing many SMEs on sportsbetting and end-to-end operations and regulations by working shoulder-to-shoulder with regulatory agencies in implementing this technology from legislation to start up. This experienced support will be critical to the IGC if sportsbetting becomes legal in Indiana.
- Maintaining skilled staff that yields questions from around the globe on step-by-step procedures for verification procedures and also provides training services/workshops to regulatory agencies to educate the field inspectors on best practices.
- Constantly educating and researching technologies to keep their compliance team knowledgeable and skilled to analyze and independently develop testing for new technologies. GLI is the only lab with the skillset and capacity to pre-plan for the onset of new technology. We practice this for the benefit of our customers.

Table 5 outlines the positions and number of Technical Compliance personnel available to support this engagement.

Table 5: Technical Compliance Personnel

Title	Number of U.S. Resources	Position Descriptions
Technical Compliance Engineering Manager	1	Manages the day-to-day operations in the Technical Compliance teams and is intimately involved with the customer care technical initiatives the team has with regulatory agencies. Member of the SME team and participates in continuous education on new technologies. Frequently presents at training sessions, workshops, industry events, and internally. Manages the internal quality oversight program which is independent from the testing team. Act as a third-party oversight committee to ensure regulators around the world are receiving world class testing services.
Technical Compliance Engineer Senior	6	Provides technical consulting services to regulators, manufacturers, and Engineering staff. Performs the day-to-day operations as internal and external SMEs. Works closely with Engineering throughout the testing process as a third-party advisor.
Technical Compliance Engineer III	2	Provides technical consulting services to regulators, manufacturers, and Engineering staff.
Technical Compliance Engineer II	2	
Technical Compliance Engineer I	5	
Technical Compliance Representative	2	Provides internal technical compliance support and regulatory/supplier objective technical advice.

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.

GLI has more than the necessary resources available to support the IGC in areas of engineering and mathematics; gaming/accounting systems and communication protocols; compliance and quality assurance; and field inspections.

Our company affords a true **separation of responsibilities,** not only to provide independent work product verification, but also to comply with compliance requirements for ISO Accreditations.

As we have done throughout our partnership with the IGC, GLI maintains a separation of responsibilities whereby each team member assigned to a client functions within a single department and has no cross-functional responsibilities with other departments. That is, each group maintains dedicated and direct responsibilities rather than a singular team that performs all responsibilities.

Table 6 demonstrates the various staff disciplines and each employee is listed one time in the count totals.

Table 6: GLI Staff by Department (U.S. Only)

Department	Total
Accounting	15
Administrative/Executive	5
Client Services	22
Engineering *(includes Test Engineers, System Engineers, Protocol Specialists, Network Engineers, Forensic Engineers, Field Inspectors, and UAT Testers)*	204
Facilities	6
Human Resources	9
IT / Software Development	34
Legal	9
Math Analysts	27
Marketing	8
Quality Assurance	24
QA – Procurement	7
QA – QMS	3
Technical Compliance	18
Voting Health IT	15
Total	**406**

Our organization is structured with two key groups (**Engineering** and **Quality Assurance**), which provides for separation of responsibilities and allows for independent work product verifications for testing and certification of gaming equipment.

An example of this is illustrated in **Figure 2**, outlining GLI's process of QA personnel independently reviewing all engineering work before a Certification Report is issued.

GLI provides a Certification Report to the manufacturer and the jurisdiction. The report normally contains the program identification number of the software, a unique electronic signature that can used to validate the program description of the game, return percentages and applicable notes.

To ensure quality, GLI has a mature, thorough process leading to the final Certification Report. At GLI, it is essential to maintain independent departments to ensure the team members are specialists within their own field of expertise (e.g., the mathematicians doing the math and QA staff validating the quality of the work). This level of specialization results in a higher quality product and a more efficient process.

If it passes QA review, a final certification report is issued.

Figure 2: Separation of Responsibilities

ENGINEERING	QUALITY ASSURANCE
• Engineering (mechanical, electrical and software) • Systems and Communication Protocol • Mathematics • Field Inspections	• Quality Assurance • Technical Compliance

As demonstrated in **Figure 2**, GLI has full-time skilled professionals assigned to specific roles, including, but not limited to the following:

ENGINEERING

- **Test Engineers** – All entry-level through senior Test Engineers test hardware, software, systems and protocols. GLI's Test Engineers understand the devices' operating systems and game program source code, functional operation and jurisdictional compliance.
- **System Engineers** – System Engineers evaluate the system under test with an external perspective and focus on testing functional requirements and communication protocols.

- **Network Engineers** – GLI's Network Engineers are qualified to configure, assess, and manage wired and wireless networks. They maintain the latest information on network security threats and vulnerabilities.
- **Forensic Engineers** – GLI's Forensic Engineers are experienced with performing visual inspections, documenting the physical condition of the device, analyzing log information, analyzing all documentation of the alleged problem, analyzing the device's RAM and source codes, along with the cause of the alleged problem. GLI is the only lab that has the experience to reconstruct the environment under which an alleged incident occurred.
- **Field Inspectors** – Field Inspectors perform on-site product operational checks, compliance verifications, system integration tests, audits and network assessments. GLI currently holds ISO/IEC 17020:2012 accreditations for inspection in multiple laboratory locations. Any trained test engineer can be authorized by the Manager of Field Inspections to support the Field Inspection department. These individuals operate under the direction of the Senior Field Engineer while in the field. ***GLI has qualified Field Inspectors, already trained on field testing rules and procedures.*** GLI will only deploy experienced field inspection personnel to work within the State of Indiana.
- **Math Analysts** – Math Analysts are responsible for performing mathematical game analysis, using both simulation and direct computation, to test game designs for Return to Player (RTP) percentage, game volatility, and other key metrics. Math Analysts also test Random Number Generators (RNGs), by source code review and data analysis, to ensure that the RNGs are unpredictable and free from bias.

QUALITY ASSURANCE

- **Quality Assurance** – GLI's Quality Assurance Specialists produce certification documentation and perform a completely independent, final round of checks prior to issuing a certification. The GLI QA Department is the first and last step in ensuring that the compliance requirements are met for each submission that is recommended by GLI for approval in any jurisdiction. The QA team ensures that our test results are absolutely accurate. No test results leave a GLI office until they have been checked several times, including a final, independent review by the QA team.
- **Technical Compliance** – The QA "umbrella" encompasses the Technical Compliance Department that monitors all regulation changes worldwide. Our Technical Compliance Engineers serve as liaisons for regulators and other customers when field issues arise, or technical assistance is required. They are responsible for data collection and immediate notification to our customers regarding any gaming/lottery incident.

Statement of Independence

GLI has implemented various policies and procedures to ensure independence in our business practices. Each policy and procedure is built upon the foundation of the following Statement of Independence:

GLI is committed to maintaining independence and impartiality from the Gaming, Lottery, Voting System, and Health Information Technology (HIT) industries. To that end, the following corporate policies have been continuously adopted since the inception of the Company: GLI may generally only be retained by Sovereign Governmental Agencies (Federal, State, Tribal, and International) in connection with its work or perform services to facilitate compliance in jurisdictions regulated by governmental entities or government-approved entities. In addition, GLI may be retained by law enforcement, governmental agencies, law firms and CPA firms where expert testimony or opinions are required. Should GLI be retained, a conflict check is performed as to whether or not the Company should and/or can become involved in the case. This conflict check is done on the most conservative basis possible.

GLI may not be retained by any gaming/lottery equipment supplier, distributor, designer, or other entity to engage in consulting work in the area of slot machine design or manufacture or any other area that is related to regulatory compliance or interoperability requirements.

GLI, its employees, officers, and directors shall not engage in any business which manufactures, designs, distributes, or sells slot machines, electronic gaming equipment, or computerized systems associated with the gaming industry or any other associated equipment utilized in the conduct of gaming.

GLI may not be retained by any voting system equipment or HIT supplier, distributor, designer, or other entity to engage in consulting work in the area of voting system or HIT product design or manufacture or any other area that is related to regulatory compliance or interoperability requirements.

GLI, its employees, officers, and directors shall not engage in any business which manufactures, designs, distributes, or sells voting system products or systems or HIT products associated with the voting or HIT industries or any other associated equipment or products utilized in the conduct of voting or the implementation of HIT products.

GLI, its employees, officers, and directors may not engage in the unauthorized practice of law nor shall GLI accept or distribute referral fees or fees for legal services in the conduct of its business. If any GLI employee, officer, or director is licensed to practice law, he/she must do so in accordance with State ethics rules which govern this area.

GLI believes that it is essential that all employees conduct their day-to-day relationships with those whom we do business in keeping with the highest standards of business ethics. In keeping with this policy, no officers, directors, or employees may accept gifts or gratuities from the suppliers or entities to which GLI supplies services. Token gifts and remembrance advertising may be accepted upon notification and approval of our General Counsel. Meals in the course of ordinary business or social events involved in a conference where all attendees are invited are not subject to this restriction.

GLI employees may not hold outside employment or outside ownership in business entities that are not disclosed to GLI and approved in advance. Approval will be subject to the highest conflict of interest standard.

GLI employees may not directly own any equity or debt position in any gaming-related company. Direct ownership does not include any account where the GLI employee does not have any discretion over the assets in the account or investment. GLI does not allow for the use of trusts in an effort to circumvent this rule. Each year, employees are, when requested, required to fill out background forms relating to asset ownership.

GLI's employees, officers, and directors are subject to background investigation at any time, without notice, by the Company or any client of the Company. GLI will continue, as a part of its contractual obligation and at its cost, to assist any client in the conduct of GLI's background investigation and pledges to divulge any information necessary to achieve this goal, provided that records that are released can be assured complete confidentiality.

GLI will take all necessary steps to keep all protected information confidential. We will continue to vigorously challenge, in some cases at our own expense, all subpoenas from non-law enforcement sources that threaten the integrity of the information that we possess.

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.

[redacted]

[redacted]

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.

In support of a collaborative standards-based approach to business, GLI was the first to write and set lottery and gaming standards. Now considered to be the industry benchmark, GLI Standards are the most widely adopted technical standards in existence providing efficiency and reducing fragmentation among regulated jurisdictions.

Numerous jurisdictions around the world adopt the GLI standards. For Indiana specifically, in addition to proprietary regulations GLI-13 is used for evaluation of ticketing validation and Online systems. GLI-20 is observed for redemption terminals as well as GLI-24 and GLI-25 for Electronic Table Games and Dealer Controlled Electronic Table Games. GLI-33 is used for evaluation of Sports Wagering Systems.

We have continuously responded to the industry by innovating new standards in testing, allowing regulators to feel confident that they are providing a safe, responsible method of revenue generation for their stakeholders. Because of the significant amount of exposure to global gaming regulations and technical standards that our team has gained over decades of testing products, GLI is uniquely positioned to analyze, adapt, and merge the world's most effective set of gaming standards into the GLI Standards Series, a collection of standards that can be used to serve as a foundation for a regulatory agency's technical regulatory structure.

GLI Standards

The GLI Standard Series is intended to be adopted in whole or in part by any regulatory body that wishes to implement a comprehensive set of requirements for gaming devices. The GLI Standard Series was developed by reviewing and using portions of the documents from around the world also known as "best practices". Many regulatory bodies appreciate the convenience of having the GLI Standards as a guide to help develop their own technical standards.

The series includes the following written standards:

- GLI-11 Gaming Devices in Casinos v3.0
- GLI-12 Progressive Gaming Devices in Casinos v2.1
- GLI-13 Online Monitoring and Control Systems v2.1
- GLI-14 Finite Scratch Ticket and Pull-Tab Systems v2.2
- GLI-15 Electronic Bingo and Keno Systems v1.3
- GLI-16 Cashless Systems in Casinos v2.1
- GLI-17 Bonusing Systems in Casinos v1.3
- GLI-18 Promotional Systems in Casinos v2.1
- GLI-19 Interactive Gaming Systems v3.0
- GLI-20 Redemption Kiosks v2.0
- GLI-21 Client-Server Systems v2.2
- GLI-23 Video Lottery Terminals v1.0
- GLI-24 Electronic Table Game Systems v1.3
- GLI-25 Dealer Controlled Electronic Table Games v1.2
- GLI-26 Wireless Gaming Systems v2.0
- GLI-27 Network Security Best Practices v1.1
- GLI-28 Player User Interface Systems v1.0
- GLI-29 Card Shufflers and Dealer Shoes v1.0
- GLI-31 Electronic Raffle Systems v1.1
- GLI-33 Event Wagering Systems v1.1

Each of the standards developed by GLI provides a comprehensive and contemporary set of technical requirements covering the gaming equipment to which the standard relates. All standards in the GLI series are freely downloadable at www.gaminglabs.com.

Copies of GLI-11 v3.0 andGLI-13 v2.1 are attached hereto as **Appendix J** as these GLI standards contain technical requirements within them that would encompass rules 68 IAC 2-6 and 68 IAC 2-6.5 within the appropriate Indiana Administrative Code.

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.

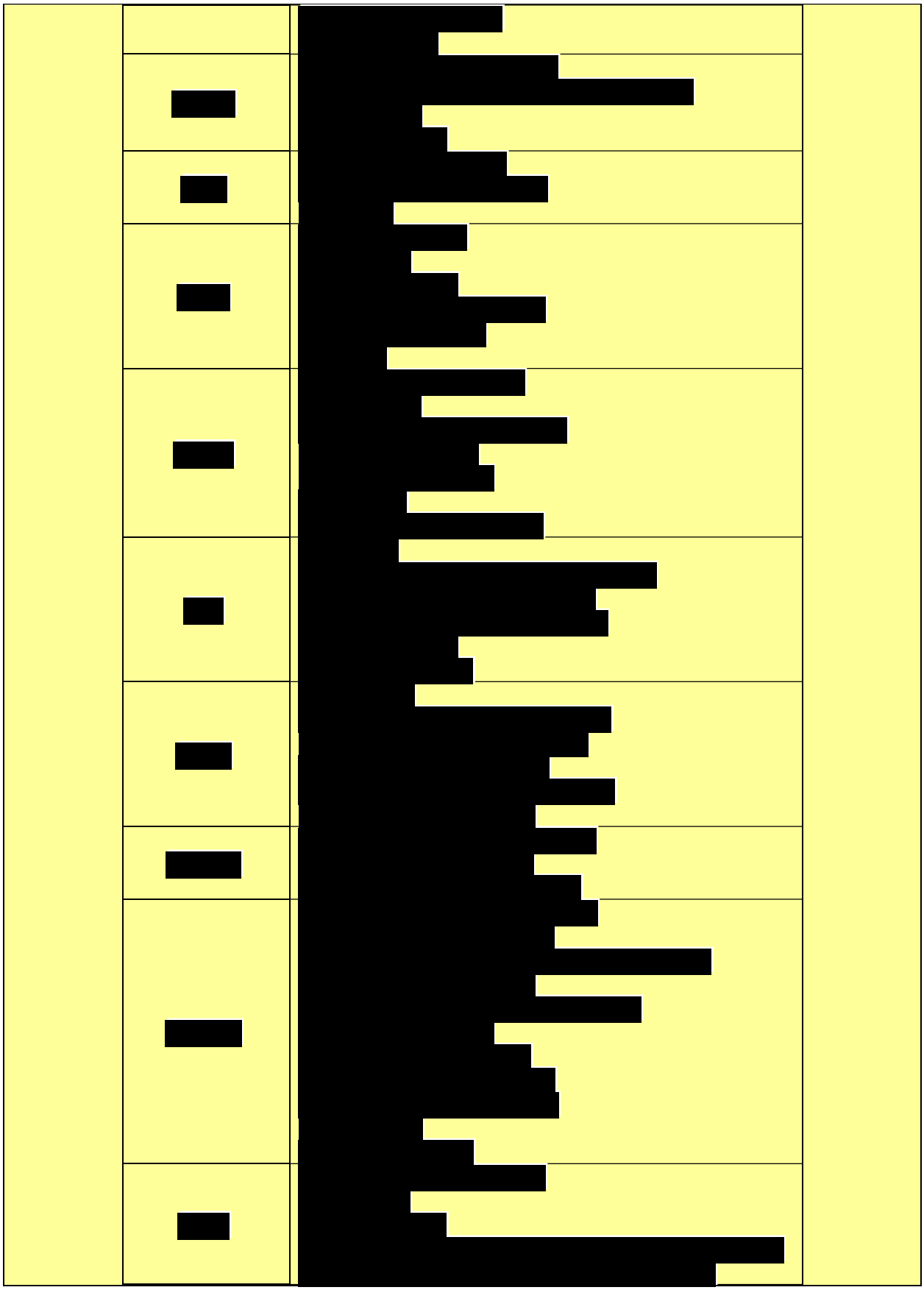
[redacted]

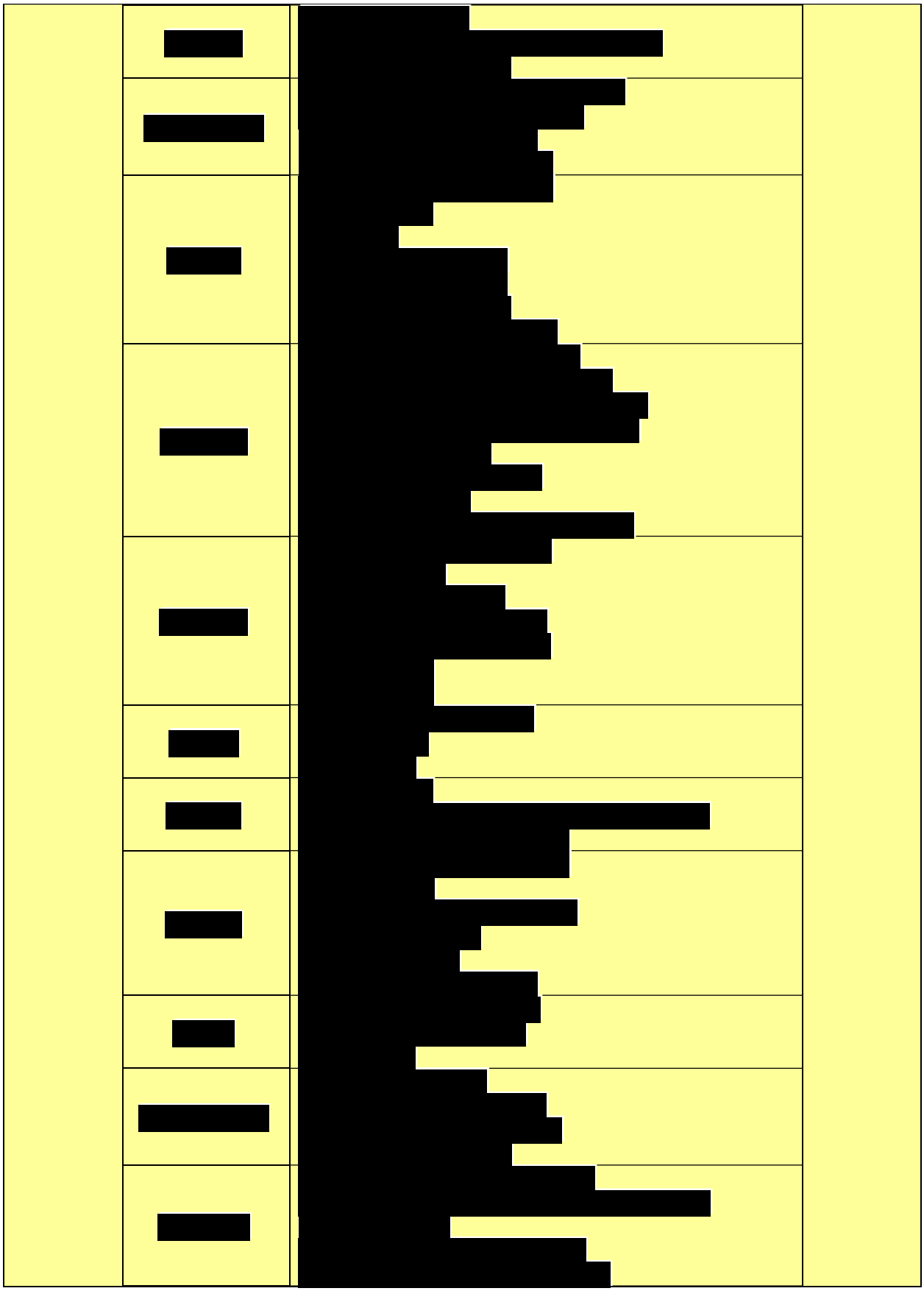
[redacted]

[redacted]

[redacted]

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]





[redacted]

[redacted]

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.

[redacted]

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).

GLI became the first testing laboratory to be recognized by the Gaming Standards Association (GSA) to perform certification testing of the current protocols, G2S and S2S, in June of 2008. As of today, the current scopes of accreditation allow GLI to test and certify products to all GSA protocols, including GAT, GDS and Transport:

TESTING LABORATORY	CERTIFICATION CONTACT	TESTING
Gaming Laboratories International, LLC – Lakewood, NJ Accreditation: A2LA	John Grau 600 Airport Road Lakewood, New Jersey 08701 United States 732-942-3999 ext. 1144	G2S (Host) G2S (EGM) GAT
Gaming Laboratories International, LLC – Wheat Ridge, CO Accreditation: A2LA	Dave Daniels 4720 Independence Street Wheat Ridge, Colorado 80033 United States 303-277-1172 ext. 2105	G2S (Host) G2S (EGM) GAT GDS S2S Transport
Gaming Laboratories International, LLC – Las Vegas, NV Accreditation: A2LA	Dave Daniels 7160 Amigo Street Las Vegas, Nevada 89119 United States 303-277-1172 ext. 2105	G2S (Host) G2S (EGM) GAT S2S Transport

GLI believes in investing in education for its staff. GLI engineers regularly attend GSA technical committee meetings. This involvement ensures GLI is in a position to fully understand these complex protocols. These meetings are the birthplace of the new protocols and discussions among GSA members provide background and clarifications in the finest detail. This insight is critical to the testing process of these advanced protocols.

GLI uses industry recognized tools for protocol related testing. Our software development team creates testing tools specifically for these protocols and GLI also purchases additional testing tools as needed.

In addition to engineers trained in GSA protocol testing throughout our company, GLI has a specialized Protocol Team that handles all items related to the various communication protocols used by the gaming industry. The team is made up of highly skilled and experienced engineers who are trained on both jurisdictional and protocol requirements. With all engineers having a background that covers game and system testing, this is the framework for understanding the importance of the communications between end points.

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.

[redacted]

[redacted]

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.

Knowledge of Industry Trends

As technology and gaming systems advance, GLI is committed to advancing the knowledge of our employees to continue to provide the expertise our clients have come to expect.

We understand the key to building an organization with technology, systems, services, and operations for the future is to ensure your business is structured to capitalize in a customer-first world. GLI's work with international gaming companies give us insight into industry trends and evolution that we will share with the IGC in the development of its strategic objectives for the decade ahead.

The gaming industry is constantly evolving. The following outline examples of how GLI stays abreast with the latest trends:

- **Regulators Roundtable:** GLI hosts the most widely attended annual industry event, the Regulators Roundtable, which features two days of stimulating general sessions,

inspiring keynote speakers, and immersive workshops covering a wide range of mission-critical topics affecting the rapidly changing gaming and lottery industries. The free-to-attend educational conference is open to gaming regulators, gaming operators, tribal gaming representatives, and state government leaders.

- **GLI University:** GLI understands that in the gaming industry, the only constant is change. This is why we created GLI University® to help regulators stay on top of emerging technologies. As part of our core business, we routinely help regulators understand the fundamental technical details, the relevant impact on the gaming industry, and the related testing/verification processes necessary to ensure the integrity of gaming for the regulatory agency, the operator, and the public.

  GLI University is globally recognized for its industry-leading courses and world-class instructors. GLI's experts are tuned in to the latest trends in the gaming industry and help regulators make informed decisions regarding new technology. In addition to education classes, GLI University offers a variety of programs throughout the year to set the stage for industry collaboration.

- **GLI's Regulatory Repository:** GLI currently maintains a vast digital repository of all regulations utilized in regulated gaming markets around the globe. This repository serves as a key resource to GLI's internal testing systems. The source requirements within a jurisdiction may be any laws, compacts, amendments, rulings or other legal documents which set forth the required structure and policies of that jurisdiction. From these source requirements, GLI feeds internal testing systems by creating checklists, test cases, work instructions and other testing documents which will serve to confirm a component's compliance with those particular regulations.

  It is a challenge to create and maintain a repository of the hundreds of documents within the scope of global regulated gaming. GLI's Technical Compliance team commits hundreds of man hours annually to the maintenance of this key resource. Our Technical Compliance Team is constantly monitoring all regulatory agency websites, industry association websites and gaming news resources. GLI's Technical Compliance and Development teams stay in near-weekly contact with regulators to ensure that the repository is always up to date with the latest information available.

Training and Professional Certification for GLI Employees

GLI subscribes to industry best practices for job role competency mapping and certification alignment coupled to innovative incentive programs. GLI understands the importance of ongoing employee enrichment to help keep pace with emerging technologies and management approaches. All staff members performing functions on under the proposed Scope of Work are highly-trained in the use of GLI's methodology and tools.

To manage these ongoing upgrades to our staff's skill sets, GLI takes a two-track approach. First, our employees are encouraged and rewarded to confirm their competencies by obtaining formally awarded industry standard ratings and certifications. Second, consultants are directed to enrich those competencies by familiarizing with and applying

proprietary processes and/or tools that GLI has developed which incorporate those same standards.

GLI relies on a formal training model to make this two-track approach work. Formal training plans and goals are created for GLI staff, targeting specific skills and verifiable performance levels, per GLI's own standard procedures and policies. Staff then accomplishes those goals via textbooks, on-line courses, and/or formal instructor-led class work. Regardless of the training delivery media involved, the outcome is the same: clearly designated skills with proven performance outcomes.

All GLI staff receive a minimum of 40 hours training each year relative to their specialty. On average, training for each staff member exceeds 80 hours per year.

GLI has developed a model of compensation that rewards employees for attaining and maintaining certifications that support their job roles. This is coupled with a balanced scorecard to moderate the right behaviors with respect to certification. People do not certify for the sake of having the certifications on paper, they understand how it relates to their job role and the marketability of their skills to clients.

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.

GLI is currently fully operational with sufficient staffing, facilities, and equipment needed to continue performing Compliance Testing and Consulting Services for the IGC.

GLI already maintains the equipment, tools and machinery to accommodate testing for all of the suppliers and each of their products as required within the RFP.

Table 8 outlines the office space GLI has been utilizing for the testing services supplied to the IGC since the inception of gaming within the State of Indiana and will continue to support the IGC for the proposed services.

Table 8: GLI's U.S. Office Locations

	***GLI New Jersey*** *600 Airport Road, Lakewood, NJ 08701* GLI's Lakewood, New Jersey office includes two identically-sized buildings offering approximately 100,000 square feet to conduct testing and validation services in.

GLI Las Vegas

7160 Amigo Street, Las Vegas, NV 89119

GLI's Las Vegas, Nevada office is an 85,000 square foot facility. The office is comprised of two-stories with administrative and testing offices. The back of the building houses the largest interoperability testing laboratory in the world.

GLI Colorado

4720 Independence Street, Wheat Ridge, CO 80033

GLI's western regional office in Wheat Ridge, Colorado is a free-standing, two-story brick structure. GLI occupies the entire facility. All exterior entrances are monitored by an electronic access system in addition to video surveillance. Each floor is 20,000 square feet for a total of 40,000 square feet.

As needed, additional support is available through our other worldwide locations. In total, GLI has 24 office locations worldwide. Our commitment to providing the highest standards of testing and certification to our clients is demonstrated by our operation of ***17 fully-accredited testing laboratories worldwide***, 9 fully accredited inspection bodies in the Americas, Europe, Australia, and Africa, and 2 fully accredited product certification bodies in the USA and Netherlands.

Figure 3: GLI's Global Locations

Laboratory Equipment Available for Testing

GLI has all of the necessary computer capabilities to successfully deliver the requested services to the IGC. GLI currently owns hundreds of hardware devices and software applications used to test gaming devices.

Testing Equipment-Hardware

GLI has tested and certified over **4.4 million** gaming and lottery machines, devices and systems worldwide. For each gaming machine, GLI has special test tools and trained staff that allow GLI to perform tests efficiently. These tests may include but are not limited to the following:

- Verify payout functionality
- Verify meter functionality
- Verify error messages
- Verify device memory
- Access program code and confirm program integrity

GLI's diagnostic tools include oscilloscopes and data line analyzers that enable testing and debugging of hardware and communications related items.

All emulation and diagnostic tools are fully portable and may be taken to an on-site location to perform forensic examination of any malfunctioning device or component.

Within the laboratory, we provide test engineers with test PCs, gaming devices, peripherals, test systems, protocol testing software, source code comparison software, EPROM utility devices, compilers, emulators, simulators, debuggers, spreadsheets, word processing and database software, casino supplies, and an assortment of cables and connectors. We categorize and document all equipment and software on lists maintained by each department. We also maintain a comprehensive catalog of all authorized software. We validate that software developed in-house meets all applicable client requirements and industry standards.

We use all of these tools in the tasks associated with review, device testing, verification, math analysis, forensic analysis, technical supervision, interoperability testing, result reporting, system audits, flowcharting, process mapping, and updating internal documentation.

We also index all information for easy access and traceability. We preserve test results in GLI's databases in a manner that prevents alteration of original observations and recorded data. Finally, we send all equipment requiring calibration to accredited calibration laboratories according to its calibration cycles.

Testing Equipment-Software

GLI's engineering staff independently developed a SAS simulator to determine whether the gaming device manufacturer properly implemented the protocol.

Additionally, GLI has developed various specialized tests used for:

- Random Number Generation analysis
- Keno payout percentage analysis
- Volatility analysis
- Poker Optimum Payout analysis

These specialized tests are performed as part of GLI's device certification procedures.

GLI has developed numerous tools to aid in its testing process and in the overall certification process. These include math tools to assist in the mathematical evaluation of different gaming devices and systems. Specifically, an RNG test suite, the Exactomizer program, and numerous simulation programs have been developed. Tools have also been developed to aid in testing the protocols used by gaming devices and systems, including a GLI Scale, S2S, SDS, Xseries, and SAS simulators. Additionally, GLI has developed a system of applications and suites to help improve test cycle time and quality.

GLI has various staff members with expert training in every domestic gaming and lottery protocol simulation tool that has been used to simulate communication with a VLT or VGM in the last twenty years. These protocol simulation tools include the following: Poll2, ProSim, IGT ICIS-M simulator, IGT ICIS-H simulator, GPoll and GPoll 2 simulators (DXS), Multimedia Game Site Control Simulator, SAS simulator, RadBlue G2S simulator and the RadBlue S2S simulator.

In addition to simulators, GLI has multiple staff trained in the use of multiple types of data analyzers that are used to monitor the communication between two devices, typically a VLT and a site controller. GLI uses a number of different tools that can be used to monitor various types of serial and TCP/IP protocols.

GLI has also contributed and continues to contribute to the development of GSA protocols. GLI has internally developed specific test scripts to be used with each of the proprietary protocols.

GLI also performs protocol testing between devices and various systems in its interoperability centers located in the North American offices.

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.

Through the use of our proprietary systems as well as customized processes in place for the IGC, GLI ensures that the IGC is provided 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.

As a result of our longstanding relationship with the IGC, GLI understands gaming in the State of Indiana. For example, when the IGC voiced concerns regarding suppliers suspected of seeking approval of equipment not intended for installation in Indiana and causing IGC to receive unnecessary certifications, the IGC reached out to GLI for support to modify its process and developed a catalog of approved software customized to each casino. Paul Magno, Executive Vice President and Tim Reigel, Chief Technology Officer, worked with the IGC to develop a custom solution.

GLIAccess is a web-powered database of submissions, certifications and revocations that serves as an invaluable resource to regulatory agents in field inspections. This GLI database allows for users to securely obtain a wealth of information to increase efficiencies throughout and even after the certification process.

GLI has established a procedure for the purpose of the secondary approval process which flags any certification processed for Indiana. Once a certification is processed for Indiana, the status in GLI's system is placed to 'Draft' (DR) while the report undergoes the IGC review. Upon the status being set to 'Draft' within GLI's system, the report gets emailed to the IGC for final review and approval. GLI takes extra caution to ensure no other parties receive the approval until the IGC has completed its review and approved the device for use in Indiana at which time the status is changed to 'AP' (Approved). Approved items are available on the Indiana Approved Report available on GLI's website used by the IGC field inspection staff.

Electronic versions of Approved Reports, a condensed list of certification reports, contain all information required for a field audit by the regulator. GLI's Point.Click.Review enables regulators to review certifications prior to the lab releasing them. Regulators often download or print a copy of the Approved Report when performing an inspection or software spot check in the field. Certification Reports, an extended version of the Approved Report that includes item descriptions and notes of importance, are also available for retrieval. Both Approved and Certification Reports can be filtered along vital and practical criteria including, but not limited to, jurisdiction, game name, manufacturer, submission type, and date range. Users can adeptly leverage analytics, identify trends, and conveniently access the information relevant to a wide variety of issues.

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.

GLI maintains a **Submissions Database** which is a catalog of all items and technologies submitted to the laboratory for certification testing. The Submissions Database stores the critical information for the submitted items and the approval that is ultimately used by the IGC field inspections staff.

Custom to the IGC's specific needs, due to a secondary approval process, GLI's staff will update the status of an Indiana submission that is pending IGC approval. In this case GLI would mark the item as "DR" or Draft where it will remain in this status until GLI receives IGC approval. It is at that time the status is set to "AP" or Approved.

The IGC can at any time visit GLI's secure website www.gaminglabs.com, which is available 24 hours a day, 7 days a week to access the Approved information or listing of items approved by the IGC for use in Indiana. It all starts with GLIAccess, your backstage pass to everything you need to know about submission status, certifications, and more. The IGC staff is familiar with GLIAccess and is able to quickly and easily pull the information they need. GLIAccess utilizes an encrypted username and password to access the data along with customized encrypted data communication for all data transfers. The following information is available via GLIAccess to GLI's clients, which may be customized to the IGC's needs:

- **Approved Reports:** GLI's secure website offers electronic versions of the Indiana "Approved Reports" which essentially is a condensed list of each certification report issued for the jurisdiction. The report only lists the information that would be needed for a field audit. Several of GLI's clients download their latest approved report prior to visiting a casino for 'spot check' software audits.
- **Pending IGC Approval Report:** GLI's secure website has developed a custom report unique to the IGC that provides a listing of all submissions to the laboratory that have had certification testing reports issued to the IGC that are pending IGC approval. These would be the items marked as "DR" or Draft within GLI's Submissions Database.
- **Certification Reports:** The secure website also enables the retrieval of electronic copies of Certification Reports. These reports are the expanded version of the items on the Approved Reports and provide item descriptions, features/options of the software, specific protocol information, and any notes that may be of importance.
- **Client Advisories:** When one of GLI's staff becomes aware of a problem with software running in the field or of instances of cheating, the Compliance Department prepares a "Client Advisory". These documents are immediately sent to clients via email and are posted to GLI's website for reference. Often these documents contain temporary solutions until replacement software is available.
- **Verification Manual:** The Verification Manual was developed based on customer requests. This document provides regulators with a guide to perform software audits on any of the games on the floor. There is a color representation of the Central Processing Unit (CPU) Board for each manufacturer's platform that points out the programs that contain critical information. In addition, the document

explains the process for performing signature verification for each critical program on certain platforms that use obscure verification methods. They asked and GLI delivered. The positive feedback from the Regulators has been overwhelming on this feature.

Device & Data Security

All GLI facilities have adequate space for storing and protecting gaming machines regardless of whether they are currently under test. GLI facilities have procedures to control machine inventory and handling. Software media is stored in a secure location within GLI facilities, which is monitored 24 hours per day, seven days per week. Access to these storage locations is limited to certain GLI personnel. All submitted software is categorized and tracked by the submission assigned to the project and the software ID.

All data in the Submissions Database is secured on GLI's network, where the data will be stored, and can only be accessed by employees with proper credentials. The data on GLI's website is password secured and logs are kept of who logged in and from what IP address. GLI does not issue website user names and passwords without authorization from the IGC. GLI utilizes a secure communication protocol which has been tested by third party IT companies.

All data is backed up nightly and kept in a secure location at GLI's facility, as well as copies of the data being kept at a secure offsite location.

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.

GLI does more than just help regulators and manufacturers ensure gaming devices adhere to a set of rigid standards. GLI has been helping jurisdictions around the world set those standards since 1989. Based on information gathered by GLI in over a decade of systems and device testing, GLI developed the **GLI Standard Series,** a collection of specifications and performance targets designed to serve as industry standards that, if met, ensure gaming devices and systems are fair, secure, auditable, and able to be operated properly.

GLI has direct experience assisting IGC with the development of Technical Standards. In 2019, GLI was engaged to provide consulting services for writing technical standards and regulations for Sports Betting and Fantasy Sports.

In addition to the IGC, dozens of jurisdictions around the world have turned to GLI for assistance with writing their gaming regulations. This is because GLI has unparalleled experience analyzing and testing gaming equipment to regulations for all regulated jurisdictions. With this extensive base of knowledge and experience, GLI knows exactly how to custom-tailor regulations to suit the nuances of any jurisdiction. Whether GLI's assistance is needed in drafting a Casino Control Act, a Tribal-State Compact, or an Internal Control

Document, its years of expertise in drafting rules and regulations for regulatory bodies around the world makes these tasks more efficient.

GLI understands that as a global independent testing lab, serving hundreds of regulatory agencies worldwide, it is in a unique position of contact with all global regulations. GLI takes this opportunity seriously and confidently manages an exceedingly growing repository of regulations which serve to affirm the integrity and compliance of gaming products around the world.

GLI Regulatory Repository

GLI currently maintains a vast digital repository of all regulations utilized in regulated gaming markets around the globe. This repository serves as a key resource to GLI's internal testing systems. The source requirements within a jurisdiction may be any laws, compacts, amendments, rulings or other legal documents which set forth the required structure and policies of that jurisdiction. From these source requirements, GLI feeds internal testing systems by creating checklists, test cases, work instructions and other testing documents which serve to confirm a component's compliance with those particular regulations.

Over the last several years, GLI has made tremendous strides in identifying the shared adoption of regulations amongst jurisdictions. This was facilitated by creating a relational database including each regulation, the adopting jurisdiction, the relevant technology type and other ancillary descriptors. This database has allowed GLI to interact with the regulations in a more refined way, since it can now read a regulation a single time and know exactly which jurisdictions follow that regulation. This level of information allows GLI to broaden its awareness of the impact of failed regulations and produce exacting differentials or "gaps" between various jurisdictions' requirements.

It is a challenge to create and maintain a repository of the hundreds of documents within the scope of global regulated gaming. GLI's Technical Compliance team commits hundreds of man-hours annually to the maintenance of this key resource. Its Compliance team is constantly monitoring all regulatory agency websites, industry association websites and gaming news resources. GLI's Technical Compliance and Development teams stay in near-weekly contact with regulators to ensure that the repository is always up-to-date with the latest information available.

Not only does GLI understand Indiana's gaming regulations, GLI is uniquely positioned within the industry to provide input from domestic and global gaming regulators. It is critical to remain current with the latest technologies to sustain current gaming environments and support gaming expansion.

Technical Standards Consulting Experience

GLI's clients understand that a global independent testing lab, serving hundreds of regulatory agencies, places GLI in a unique position to consult with all regulators worldwide. Our Technical Compliance team consistently assists regulators with setting standards. GLI's team is committed to providing valuable support to the IGC as technology evolves. Since the beginning, over 33 years ago, GLI has provided rule writing support to regulators. A sample of our experience is provided in **Table 9**.

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	
[redacted]	[redacted]	[redacted]	[redacted]	

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

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

GLI has an abundance of experience in creating testing methodologies designed to confirm compliance of gaming products. As this is a core component of GLI's business, the company has invested a significant amount of resources into the creation of customized test scripts for each regulated market that the company performs certifications for. With over 33 years of experience in creating test scripts used within over 480 regulatory agencies around the globe, GLI has demonstrated a significant amount of expertise in this area.

Test Script Repository

GLI continually builds upon a comprehensive set of testing methodologies designed specifically for compliance testing of gaming technology. As a fundamental part of this effort, we maintain a digital repository of all regulations utilized in regulated gaming markets around the globe. Using these source regulations and any other requirements introduced by a regulatory agency, GLI feeds internal testing systems by creating checklists, test scripts, work instructions and other testing documents which serve to confirm a component's compliance with those particular regulations. This repository serves as a foundation from which experienced test engineers and compliance professionals create customized testing methodologies aligned with the collective set of regulatory requirements for each regulated market.

Test scripts and specific instructions are created and reviewed using a multi-departmental review process to ensure that the instructions are constructed in a way which thoroughly meets the regulatory intent while also considering important technical details and considerations based on historical testing experience. We have worked diligently to create a process which provides prompt notification of regulatory and testing methodology updates to relevant staff. Additionally, GLI has implemented a delivery system which facilitates the distribution of the current test cases to engineers around the world immediately once published.

eResults Evolution

We are committed to developing and maintaining accurate test scripts for all products tested for the IGC. All requirements are first vetted by both GLI's Technical Compliance and Engineering teams for suitability. Once all concerns have been addressed, a test script is written by a qualified engineer typically with years of experience testing similar requirements. The test script is submitted for peer review within the Engineering team and then for review by Compliance. Finally, the test script is committed to **eResults Evolution**, a custom proprietary test case management solution.

eResults Evolution is used by each test engineer across all GLI labs for compliance testing. By centralizing GLI's evaluation criteria into specific scripts that are designed to thoroughly test all jurisdictional requirements, and then implementing those test scripts in every GLI office, we can ensure that GLI's testing is consistent across all locations, and that those tests effectively address all of the latest regulatory requirements.

<u>Benefits of GLI's eResults Evolution</u>

- Improved quality by providing each GLI engineer with a comprehensive set of testing criteria where there are minimal chances for deviation from the prescribed steps.
- Continuous improvement in quality by constantly updating the testing steps to incorporate best practices obtained from experience obtained globally.
- Improved quality by achieving increased consistency across all GLI offices/testing groups.

- Increased effectiveness of GLI's engineering training program where a tester has supplemental instruction in between hands-on training sessions.
- Regulatory changes/clarifications are immediately broadcasted to all GLI engineers and incorporated within the required testing criteria necessary to complete a certification.
- Thoroughness, accuracy, and efficiency are gained as a result of a testing tool that accompanies an engineer throughout the testing process.

This system is unique in that the test engineer will not simply be presented with hundreds of regulations that need to be reviewed for each project that they are testing. Instead, definitive testing criteria are provided in tangent along with the specific regulation with clear and objective test result expectations. These results are linked to multiple regulatory requirements across multiple jurisdictions that share the same intent. This allows for multiple requirements to be satisfied with a single test process, and answering one or two validation questions, which in turn satisfies multiple regulatory requirements. This translates to greater efficiency while also maintaining focused and stringent quality standards. This system allows quick turnaround of transfers without duplicating testing for requirements already met through testing for other jurisdictions.

Although the test script steps and validations occupy the primary focus of the application, the engineer can view each regulatory clause associated with the purpose of each testing step in its original text. The engineer can even take it a step further and view the entire source of any relevant regulatory document that the clause was obtained from for context. All of this is made available to each GLI engineer directly from within the application itself.

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.

GLI's accounting system is currently set up to and will continue to directly bill a Supplier Licensee for Certification Testing, as required by contract.

GLI tracks all projects by jurisdiction. Accordingly, GLI invoices are tracked by jurisdiction, then by project. GLI's accounting records database contains the invoice number; invoice date; name of licensee entity or individual to whom the services were rendered; services rendered; invoice amount; date payment received; and method of payment.

Additionally, GLI has standard accounting reports as follows:

- A sales summary report of all invoices submitted to licensees, entities or individuals, showing the invoice number, invoice date, name of licensee, entity or individual to whom the services were rendered, type of service rendered, and invoice amount.

- An accounts receivable summary report of all invoices submitted to licensees, entities or individuals, showing the invoice number, invoice date, name of licensee, entity or individual to whom the services were rendered, invoice amount, date payment received and method of payment.

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

GLI is willing to submit to a full investigation as required of a selected Respondent to this RFP. The company and its owners, directors and identified key personnel will comply with all full investigation requests and requirements of the IGC pursuant to this RFP.

APPENDICES G-L

GLI has included the Appendices listed below in the separately attached file folder, entitled *"Appendices"*:

- Appendix G – List of Jurisdictions with Contracts & Services
- Appendix H – ISO Accreditations (U.S.)
- Appendix I – Resumes
- Appendix J – GLI Standards
- Appendix K – Sample Certification Reports
- Appendix L – Sample Test Scripts