

GLI®

WORLD HEADQUARTERS

600 Airport Road
Lakewood, NJ 08701

P: 732.942.3999

F: 732.942.0043

gaminglabs.com

iGaming

NAVIGATING THE DIGITAL
WORLD OF INTERACTIVE
ENTERTAINMENT



GLI's core purpose is to be the trusted global compliance and quality expert relied upon by our clients – delivering world-class customer service and value that is unmatched.

© 2017 Gaming Laboratories International. All rights reserved. All registered and unregistered trademarks are the property of their respective owners.





YOUR TRUSTED iGAMING PARTNER

ASSISTING NEW AND EXISTING JURISDICTIONS

As operators, regulators and suppliers worldwide seek to expand their territory and mature gaming in their jurisdictions, more and more are turning to the next generation of entertainment – iGaming. Of course, moving to a digital environment opens opportunities and captures new markets; however, what type of iGaming is best for you, what pitfalls should you avoid, and what can you do to ensure your platform and games are robust? How can you best secure your data and your patrons' play, all while maintaining jurisdictional integrity? Fortunately, the experts at GLI have the answers.



ANTICIPATING THE INCREASING SHIFT TO INTERACTIVE ENTERTAINMENT

A New Generation of Gamers

While land-based revenue remains solid among older demographics with traditional slot play, younger demographics continue to lean toward alternative forms of gaming such as table games and interactive entertainment. Casino operators are looking for ways to attract new players while providing social outlets that younger demographics have become accustomed to. Newly approved legalized online gaming operations are expanding at a rapid pace, and grey areas still continue to push the limits.

Are You Positioned for Growth?

What started off as incremental revenue has grown into a multibillion-dollar industry which could completely change the way we see gaming in the future. All of this growth, change, and evolution can be confusing, which is why GLI is here to help you understand the benefits and security risks of the ever-changing multi-dimensional areas of iGaming.





A SUCCESSFUL HISTORY IN iGAMING

Laying the Groundwork for All Markets

GLI is the established world leader in iGaming testing, assisting numerous existing and emerging jurisdictions in the development and updating of their iGaming technical standards. Our team of experts enables each jurisdiction to succeed in their fair and secure iGaming expansion endeavors.

ESTABLISHING GLOBAL STANDARDS

Support for Every Region of Your Business

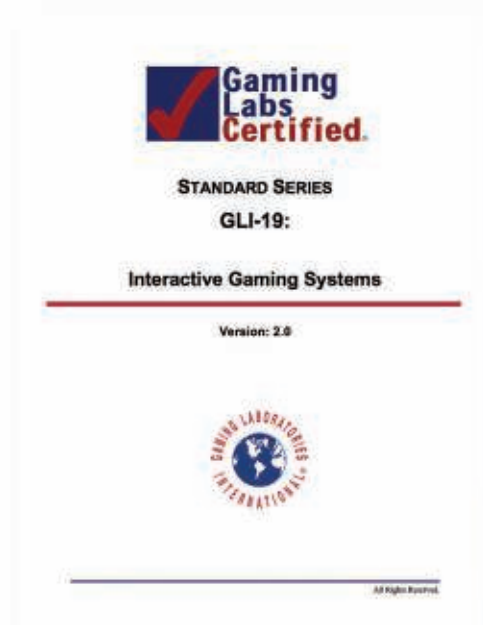
Our labs successfully certified the first interactive gaming systems to go live in highly respected, regulated jurisdictions in Australia, Asia such as First Cagayan (Philippines), and Europe, such as Alderney, the Isle of Man, and the United Kingdom. In addition, we certified the first Canadian online lotteries, casinos, poker and sports wagering systems in British Columbia, Manitoba and Québec. Since then, GLI has assisted clients entering U.S. markets in Nevada, Delaware, and the Bahamas, as well as additional European jurisdictions, such as Gibraltar, Denmark, Malta, Portugal, Spain, Italy, and Romania. GLI also serves as a key resource to clients and regulators across Latin America.

GLI STANDARD SERIES

GLI-19: Interactive Gaming Systems

We offer a broad range of testing, assessment and professional services to both the iGaming and land-based marketplaces, and we work with the vast majority of Internet, mobile, interactive T.V., and In-Venue Tablet/Wireless stakeholders. Additionally, to facilitate the introduction of iGaming into new jurisdictions, GLI published GLI-19, a technical standard for iGaming regulation that can be adopted in its entirety, or used by regulators as a model to help develop their own technical standards.

Let our highly trained and experienced staff help you realize your full potential in today's and tomorrow's leading technologies.





iGAMING TESTING SERVICES

Our iGaming Testing Services Are Your Solid Foundation

GLI is known worldwide for providing the most comprehensive set of iGaming services that include:

- Game Evaluations
- Game Math and % Return to Player (RTP) Evaluations
- Game Payout Analysis and Reporting
- RNG Testing, RNG Data Analysis & Reporting
- Platform and Remote Gaming System (RGS) Testing
- Integration, Application Program Interface (API) and Communications Testing
- Security Audits (Penetration Testing, Vulnerability Analysis, Threat and Risk Assessments)
- Slots, Poker, Bingo, Jackpot and Progressive Testing
- Sportsbook, Pari-mutuel and Exchange Wagering Testing
- Live Dealer Testing, Proxy and Skill-based Gaming Evaluations
- Daily Fantasy Sports (DFS), eSports and Social Gaming Audits
- Technical Standards Document (TSD) Development & Consultancy
- Multilingual Services, Consultation and Compliance Support

PROFESSIONAL SERVICES

Helping to Ensure Your Success

In the highly complex digital world of iGaming, you need more than the world's best test lab – you need a partner that offers a full range of professional services to help ensure your success in development, launch, daily functionality and security. **GLI Professional Services**SM offers an all-encompassing range of services to help you get started and protect you every step of the way including:

- Software Quality Assurance (QA) and Testing
- Test Automation
- Functional Testing
- Load and Performance Testing
- Security Testing
- Source Code Review
- Governance, Risk & Compliance
- IT Process Improvement
- IT Security Audit and Consulting
- Internal Audit and Enterprise Risk Assessment
- Payment Card Industry PCI:DSS
- Source Code Security Audit
- ISO Consulting
- ISO 27001 Information Security Management Systems Certification
- Core Systems Modernization
- Project Management Office
- Program/Project Management
- Systems Integration
- Project Health Check and Recovery





SECURITY MANAGEMENT IN iGAMING

Data is Money. Secure it Like Fort Knox.

The highly regulated gaming industry is overseen by regulators in each gaming jurisdiction who establishes technical standards for the offering of fair, secure and auditable gaming operations within their jurisdiction. Early regulatory regimes for interactive gambling realized that information security would be a significant factor that would need to be considered, and as a result, many iGaming technical standards have included security elements. These requirements extend to both the technical requirements of the gaming systems themselves and the internal controls needed to manage the gambling operations offered through the interactive gambling systems.

Test for Perfection

The only way to ensure the correct functioning of an information security framework is to test it. Depending on the business requirements of the organization and jurisdictional technical requirements, testing can take a number of forms. The scope can be tailored to cover an assessment of a specific security element's effectiveness all the way up to a complete compliance audit of the organization's entire information systems security to achieve certification.

CUSTOM SECURITY AUDITS TO MEET YOUR NEEDS

Our **Information System Security (ISS) Audits** evaluate how your organization's security is implemented against a particular standard. The goal of the audit is to provide a report of vulnerabilities classified by severity and/or a determination of compliance to a third-party standard that may ultimately result in certification or accreditation to that standard. During an audit, any areas of non-compliance with the standard are brought to your attention in the form of non-conformance reports which are typically addressed before a system is deemed compliant.

Audits are Customizable to Your Organization's Specific Needs and Take Many Forms Such as:

- ✓ Penetration Testing
- ✓ Continuity of Operations Audit
- ✓ Network Vulnerability Scan
- ✓ Incident Management Audit
- ✓ Vulnerability, Threat and Risk Assessment
- ✓ Internal Infrastructure Testing
- ✓ Technical Controls Audit
- ✓ External Infrastructure Testing
- ✓ Physical & Environmental Controls Security Audit
- ✓ Cloud Computing Security Audit
- ✓ Personnel Security Audit
- ✓ Application Security Testing
- ✓ PCI Qualified Security Audit
- ✓ Security Source Code Review
- ✓ PCI Approved Scanning Vendor Scan
- ✓ Social Engineering Audit
- ✓ Disaster Recovery Audit
- ✓ ISO 27001 Audit

SPORTS BETTING

Knowing the Boundaries and Understanding the Challenges

Sports betting, a long-standing pastime, is the activity of predicting sports results and placing a wager on the outcome. The frequency of sports betting varies by culture. Today, bets accepted and reconciled through interactive means by operators extend to non-athletic events as well, such as reality show contests, political elections, movie and music award shows, and non-human contests like horse racing. Consequently, ensuring the accuracy of odds and settlement of wagers is fair and secure is vital.

Our assessments can be applied to many forms of sports betting including:

- Online Sports Betting
- Fixed Odds Betting
- Pool Betting
- Parlay Betting
- Betting Exchanges





Ensure Compliance with GLI

GLI's testing is an assurance that event wagering complies with appointed jurisdictional technical standards and best practices. In addition, our processes ensure wagers are accepted in a fair and secure manner and that resultant betting outcomes are in accordance with pre-specified rules. Our testing of the system verifies that all wagers placed are correctly resolved and paid based on the correct odds and rules corresponding to the game or event.

We also verify that appropriate mechanisms and controls are in place for adherence to technical requirements associated with the handling of wager disruptions and cancellations, abandoned events and refunds. Lastly, GLI analyzes the front-end activity with back-end results and confirms a complete and accurate log of transactions, performance, and payments are available upon request from the system for regulatory, taxation, player dispute or other purposes.

Daily Fantasy Sports (DFS) Testing

In addition to being able to provide compliance testing for regulated Fantasy Sports markets, GLI has pioneered a unique service for fantasy sports applications. For clients seeking supporting evidence that their fantasy sports games reflect knowledge and skill of their bettors, we have developed a testing approach intended to demonstrate exactly that. This testing does not depend on the historical performance of actual fantasy players and can be applied to new and old game concepts alike, allowing for such analysis to take place before new games even come to market.

Defining Skill-Based Play

To establish the necessary contrast in performance between players of varying skill, GLI programs two types of simulated players, referred to simply as unskilled and skilled. These simulated players play against each other, using historical sports data for the sport in question.



A close-up photograph of a person's hand holding a black pen, poised to write on a document. The document features a colorful pie chart with segments in green, yellow, red, and blue. The background is slightly blurred, showing what appears to be a computer keyboard and other office equipment. The lighting is bright, creating a professional and focused atmosphere.

ISO AUDITING

Auditing that Increases Your Credibility

As the iGaming industry has matured, so have the security requirements of iGaming jurisdictions. The latest iterations of gambling technical standards and licensing requirements from many highly regulated jurisdictions utilize the latest versions of ISO/IEC 27001 as a general security standard and ISO/IEC 27002 as implementation guidelines for information security management in iGaming jurisdictions. These global standards and guidelines provide flexible baselines for information security management that can be applied to iGaming operations, regardless of the variability in the individual businesses operators.

Some benefits of implementing the ISO security standard(s) are:

- Compliance with legal, regulatory, and statutory requirements
- A process for information security and corporate governance
- Market differentiation with ISO security standard certification
- Increase in overall organizational efficiency and operational performance
- Minimizes internal and external risks to business continuity
- Continuous protection that allows for a flexible, effective and defensible approach to security and privacy

SOCIAL GAMING AUDITS

Social Gaming Audits Keep the Game Fair

In addition to traditional real money gaming compliance testing methodologies available to social gaming operators and suppliers, GLI offers testing and auditing services specifically tailored to social gaming. This helps to ensure social gaming providers, offering products and services to the public, adhere to published standards and/or best practice principals. Our assessments are designed to reduce risk and promote consumer transparency premised upon the need for consumer protection and accountability. Successful outcomes benefit both social gaming providers and consumers alike, and instill confidence that the products and operations are transparent in their mechanics and functionality, adhere to applicable laws and regulations, and protect player privacy.





WHY CHOOSE GLI?

Unparalleled Experience

With more iGaming testing experience and certifications than any other laboratory worldwide, GLI remains the market leader and clear choice lab for the growing interactive gaming space. We are proud to have provided independent testing and assessment services for all emerging regulated iGaming jurisdictions. We work tirelessly to provide high-quality testing and security compliance audits by maintaining world-class resources globally with requisite expertise and knowledge for every regulated iGaming market where independent lab services are permitted.

More than Tested – Certified

We do more than just test software and systems; we certify them, too. When regulators and players see our Gaming Labs Certified® mark, it symbolizes that the product meets or exceeds the highest standards of quality and security demanded by the industry today.

Internationally Accredited

It is just as important to us for GLI to be independently audited, and therefore we meet the highest international standards of ISO 17020 and 17025 accreditation, signifying our continued commitment to quality and impartiality.



20 LOCATIONS WORLDWIDE

Wherever you are in the world, there is a GLI lab close by to help you. We have more than 20 locations on six continents, and we have more than 950 employees with unequalled experience and knowledge. Our multiple offices and large multilingual staff mean we have more than enough capacity to meet your testing and assessment needs, both today and well into the future as you continue to expand.



GET CERTIFIED NOW - Why wait? Start your path to testing and certification today by contacting your Client Service Representative or visit gaminglabs.com to download our iGaming white paper and learn more.



iGaming Glossary

iGaming

Gambling or wagering via some form of computer network such as the Internet or alternate digital means. This can include not only games played on computers, but also those played through mobile devices, interactive T.V., in-venue on tablets, or other peer-to-peer networks mediums.

eSports

eSports (also known as electronic sports, competitive (video) gaming, professional (video) gaming, or pro gaming) is a form of competition facilitated by electronic systems, particularly video games; the input of players and teams as well as the output of the eSports system are mediated by human-computer interfaces.

Daily Fantasy Sports (DFS)

DFS are an accelerated variant of traditional fantasy sports games where players compete against each other by building a team of professional athletes from a particular league or competition while remaining under a specified salary cap. Players earn points based on the actual statistical performance of the players in real-world competitions. Wagering is typically structured in the form of paid competitions usually referred to as a "contest"; where winners receive a share of a pre-determined pot funded by their entry fees. A portion of entry fee payments go to the provider as rake revenue.



Sports Betting

Sports betting is the activity of predicting sports results and placing a wager on the outcome through interactive means. Today, bets accepted and reconciled by iGaming operators extend to non-athletic events as well, such as reality show contests, political elections, movie and music award shows, and non-human contests like horse racing. Consequently, ensuring the accuracy of odds and settlement of wagers is fair and secure is vital.

Skill-Based Games

Interactive games in which the outcome of the game is determined by the player's physical skill (such as fast reaction or dexterity) or mental skill (logic abilities, strategic thinking, trivia knowledge).

Social Gaming

Social gaming commonly refers to the activity or practice of playing/wagering on an interactive game via a social media platform. Typically these interactive games allow or require social interaction between players, as opposed to playing games in solitude. Also refers to games that involve multiple players or a Social network game that has social network integration or elements. "Freemium" is the most popular social gaming model, where players play/wager for free.

