

# iGAMING

NAVIGATING THE DIGITAL WORLD  
OF INTERACTIVE ENTERTAINMENT



**GLI**<sup>®</sup> GAMING  
LABORATORIES  
INTERNATIONAL<sup>®</sup>

**GLI**<sup>®</sup>  
■■■■ Digital

Everywhere iGaming Is Going

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# YOUR TRUSTED iGAMING ADVISOR

## Assisting New and Existing Jurisdictions

Players are embracing new forms of gaming entertainment. That means operators, regulators, and suppliers worldwide are seeking to expand and mature their offerings. More and more are turning to the next generation of entertainment – iGaming. While moving to a digital environment opens opportunities and captures new revenue, it also raises some questions, such as what form of iGaming is best for you? What regulatory compliance or best practice pitfalls should you avoid? What can you do to ensure your platform and products are robust? How can you best secure your data and your patrons' play and maintain jurisdictional integrity? Our iGaming team has decades of experience and the answers you need to help you navigate this exciting field of gaming.



# THE INCREASING SHIFT TO INTERACTIVE ENTERTAINMENT

## A New Generation of Gamers

Land-based gaming and traditional slot play continue to be favorites among older demographics. Meanwhile, younger demographics tend to lean toward alternative forms of gaming delivery, such as online and mobile entertainment. That leaves casino and sportsbook operators looking for ways to simultaneously attract new traditional players while also providing social outlets that younger

demographics have become accustomed to.

## Are You Positioned for Growth?

What started as incremental revenue has grown into a multibillion-dollar industry which could completely change the gaming world of 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 risks of the ever-changing multidimensional forms of iGaming.



# A SUCCESSFUL HISTORY IN iGAMING

## Laying the Groundwork for All Markets

GLI is the established world leader in iGaming testing and consultancy, 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 around the world, including in Europe, Asia Pacific, Canada, and the US. These certifications were multifaceted, covering online casino, lottery, poker, sports wagering, and live-dealer technologies.

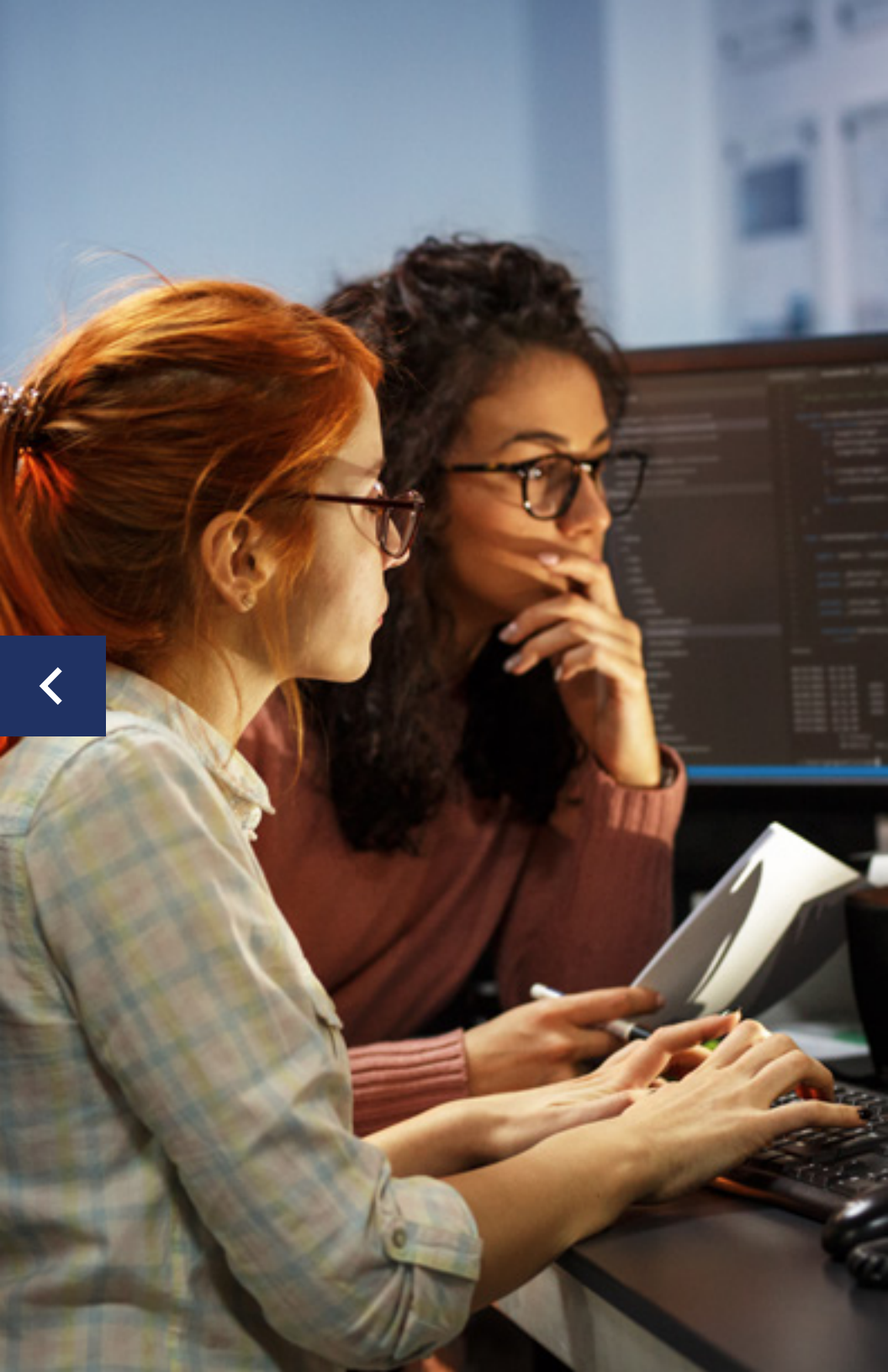
# GLI STANDARD SERIES

## GLI-19: Interactive Gaming Systems and GLI-33 Event Wagering Systems

GLI offers a broad range of testing, cybersecurity, and professional services for the interactive gaming space. We work with the vast majority of the iGaming and sports betting suppliers, both small and large, operating in the space today. Additionally, to facilitate the introduction of digital gaming into new jurisdictions, GLI published GLI-19 and GLI-33, technical standards for iGaming and Event Wagering regulation that can be adopted in their entirety by regulators or used as a base to help develop customized technical standards.



“Let our experienced staff help you  
navigate the future of gaming, today.”



# iGAMING SERVICES

## Our iGaming Services Are Your Solid Foundation

GLI is known worldwide for providing the most comprehensive set of iGaming services such as:

- 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

EXPERIENCE



# PROFESSIONAL SERVICES

## Helping to Ensure Your Success

In the highly complex digital world of iGaming, you need a trusted advisor with global experience, one that offers a full range of professional services to help navigate your way through the development, launch, daily functionality, security, and more. GLI's Professional Services division offers a full range of assistance to help you get started and protect you every step of the way such as:

- 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 (PMO)
- Program/Project Management
- Systems Integration Testing
- Project Health Checks 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 establish technical standards for the offering of fair, secure, and auditable gaming operations within their geography. Early regulatory regimes for interactive gaming realized that cybersecurity would be a significant factor that would need to be considered, and as a result, many iGaming technical standards have included security requirements. These requirements extend to both the technical requirements of the gaming systems themselves and the internal controls and procedures needed to manage gaming operations offered through interactive 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 several 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 posture 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 specific standards and/or industry best practices. The goal of the audit is to provide a report of threats and vulnerabilities classified by the level of risk severity. During an audit, any areas of risk or non-compliance are brought to your attention for discussion, and typically addressed through remediation assistance.

## 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
✓	Source Code Security Review
✓	PCI Approved Scanning Vendor Scan
✓	Social Engineering Audit
✓	Disaster Recovery Audit

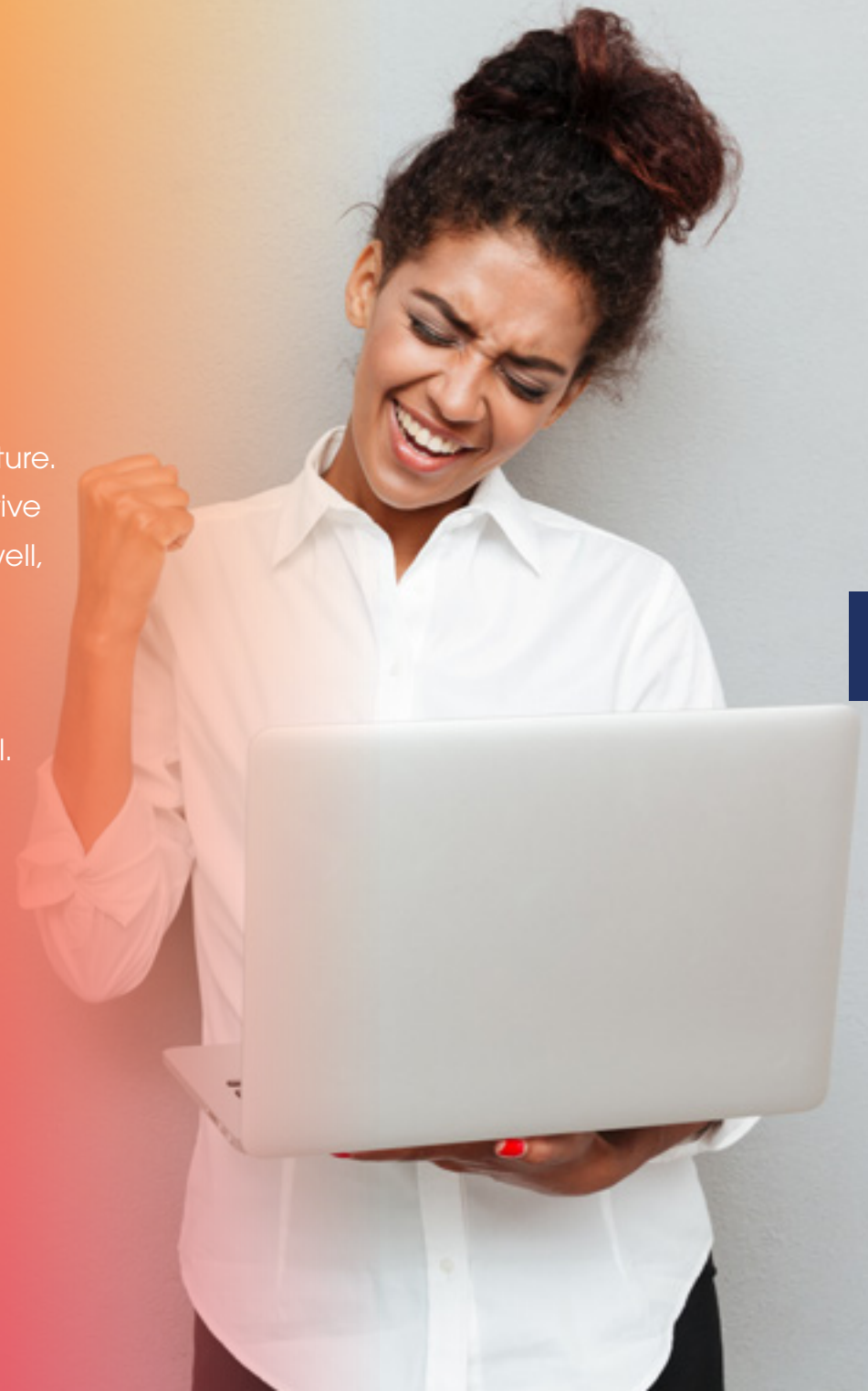
# SPORTS BETTING

## 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 nonhuman 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



# SPORTS BETTING

## 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.

# SOCIAL GAMING AUDITS

## Social Gaming Audits Keep the Game Fair

GLI assists social gaming suppliers and operators with testing and auditing services specifically tailored to social / play-for-fun gaming. Specialized approaches help to ensure social gaming providers who offer products and services to the public adhere to published standards and/or best practice principles. Our assessments are designed to reduce risk and promote consumer transparency premised upon the need for consumer protection and accountability. This benefits both the provider and consumer by instilling confidence that the products and operations are transparent in their mechanics and functionality. In addition, it also ensures that they adhere to applicable laws and regulations while protecting player privacy.



# GEOLOCATION TESTING

When it comes to online and mobile gaming, ensuring geolocation accuracy is of paramount importance. That's why our geolocation testing teams work in concert to ensure devices and systems properly recognize geofences: in-lab, in-state or in-province, and in-venue. Assessments cover when geolocation checks occur, frequency, and whether the technology restricts from any options within the site other than play outside permissible boundaries. Additionally, we assess whether time intervals change when nearing a border. We evaluate whether play is restricted to only jurisdictional residents, only country residents, only in-venue registrants, or if anyone of age is eligible to be found within the pre-set boundaries.

Geolocation testing services for iGaming or Sports Betting, both real money gaming and social gaming, include:

- In-Lab Geolocation Testing
- In-State / In-Province Geolocation Testing
- In-Venue Geolocation Testing
- Functional Testing
- Resolution Accuracy by Connection Type
- Boundary Enforcement Informed by Resolution Accuracy
- Subversive and Spoofing Technique Detection
- Edge Case Scenarios



# WHY CHOOSE GLI?

## Unparalleled Experience

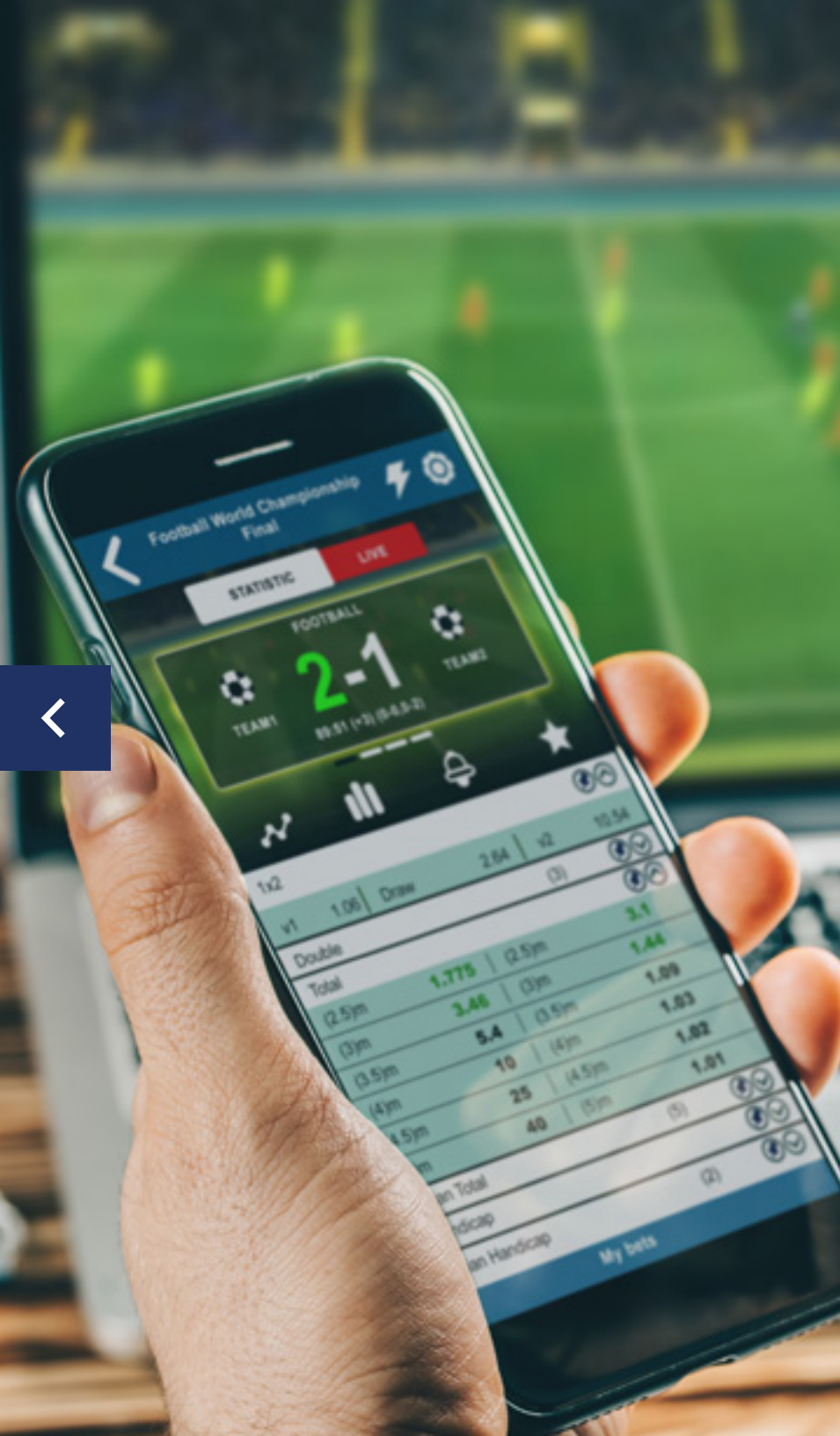
With more iGaming testing and cybersecurity auditing experience than any other laboratory worldwide, GLI remains the market leader and clear choice lab for the growing interactive gaming space. GLI is the only lab that works with every regulated jurisdiction, both established and emerging. With more certifications than any other gaming laboratory under our belt, we make our world-class resources available to you globally. Our expertise and knowledge about every regulated iGaming market help benefit suppliers, operators, and regulators looking to navigate the future of gaming.

## 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

We take our independence and expertise seriously. That's why GLI is the only global organization of its kind to hold U.S. and international accreditations for compliance with ISO/IEC 17020, 17025, and Guide 65 standards for technical competence in the gaming, wagering, and lottery industries. Simply put, this signifies our unwavering commitment to quality and impartiality.





# WORLDWIDE LOCATIONS

Wherever you are in the world, there is a GLI lab close by to help you. We have more than 24 locations on six continents, and we have more than 1,300 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.

**WHY WAIT?**  
GET STARTED NOW.



# 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 goes 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. It 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.

