InteractiveBrokers

System and Organization Controls 3 (SOC 3) Report

Independent Service Auditors' Report on IBG LLC's Brokerage System Relevant to Security, Availability, Processing Integrity, and Confidentiality.

For the Period January 1, 2023 to December 31, 2023

CliftonLarsonAllen LLP
West Hartford, Connecticut

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Section I

Assertion of IBG LLC Management

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Assertion of the IBG LLC Management

We are responsible for designing, implementing, operating, and maintaining effective controls within IBG LLC's ("IBG", "We," or "the Company") brokerage system (system) throughout the period January 1, 2023 to December 31, 2023 to provide reasonable assurance that IBG's service commitments and system requirements relevant to security, availability, processing integrity, and confidentiality were achieved. Our description of the boundaries of the system is presented in Section III and identifies the aspects of the system covered by our assertion.

We have performed an evaluation of the effectiveness of the controls within the system throughout the period January 1, 2023 to December 31, 2023 to provide reasonable assurance that IBG's service commitments and system requirements were achieved based on the trust services criteria relevant to security, availability, processing integrity, and confidentiality (applicable trust services criteria) set forth in TSP section 100, *2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (With Revised Implementation Guidance – 2022) in AICPA (*Description Criteria*). IBG's objectives for the system in applying the applicable trust services criteria are embodied in its service commitments and system requirements relevant to the applicable trust services criteria.

There are inherent limitations in any system of internal control, including the possibility of human error and the circumvention of controls. Because of these inherent limitations, a service organization may achieve reasonable, but not absolute, assurance that its service commitments and system requirements are achieved.

We assert that the controls within the system were effective throughout the period January 1, 2023 to December 31, 2023 to provide reasonable assurance that IBG's service commitments and system requirements were achieved based on the applicable trust services criteria.

The Management of IBG LLC

February 22, 2024

Section II

Independent Service Auditors' Report

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Independent Service Auditors' Report

To the Management of IBG LLC

Scope

We have examined IBG LLC's ("IBG" or "the Company") accompanying assertion titled "Assertion of IBG LLC Management" (assertion) that the controls within IBG's brokerage system (system) were effective throughout the period January 1, 2023 to December 31, 2023 to provide reasonable assurance that IBG's service commitments and system requirements were achieved based on the trust services criteria relevant to security, availability, processing integrity, and confidentiality (applicable trust services criteria) set forth in TSP section 100, *2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (With Revised Implementation Guidance – 2022) in AICPA (*Description Criteria*).

Service Organization's Responsibilities

IBG is responsible for its service commitments and system requirements and for designing, implementing, and operating effective controls within the system to provide reasonable assurance that IBG's service commitments and system requirements were achieved. IBG has also provided the accompanying assertion about the effectiveness of controls within the system. When preparing its assertion, IBG is responsible for selecting and identifying in its assertion the applicable trust service criteria and for having a reasonable basis for its assertion by performing an assessment of the effectiveness of the controls within the system. The principal service commitments and system requirements related to the applicable trust services criteria are presented in section III.

Service Auditors' Responsibilities

Our responsibility is to express an opinion, based on our examination, on management's assertion that controls within the system were effective throughout the period to provide reasonable assurance that the service organization's service commitments and system requirements were achieved based on the applicable trust services criteria. Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) and in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standard Board. Those standards require that we plan and perform our examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Our examination included:

- Obtaining an understanding of the system and the service organization's service commitments and system requirements;
- Assessing the risks that controls were not effective to achieve IBG's service commitments and system requirements based on the applicable trust services criteria;
- Performing procedures to obtain evidence about whether controls within the system were effective to achieve IBG's service commitments and system requirements based on the applicable trust services criteria.

Our examination also included performing such other procedures as we considered necessary in the circumstances.

Service Auditor's Independence and Quality Control

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements in the United States of America relating to the examination engagement. We have complied with those requirements.

We have also applied the Statements on Quality Control Standards established by the AICPA and accordingly, maintain a comprehensive system of quality control.

Inherent Limitations

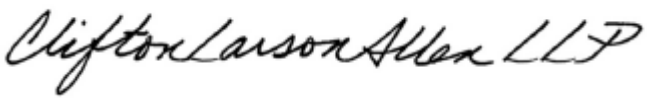
There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls.

Because of their nature, controls may not always operate effectively to provide reasonable assurance that the service commitments and system requirements were achieved based on the applicable trust services criteria. Also, the projection to the future of any conclusions about the effectiveness of controls is subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, management's assertion that the controls within IBG's brokerage system were effective throughout the period January 1, 2023 to December 31, 2023, to provide reasonable assurance that IBG's service commitments and system requirements were achieved based on the applicable trust services criteria is fairly stated, in all material respects.

CliftonLarsonAllen LLP



West Hartford, Connecticut
February 22, 2024

Section III

IBG LLC's Description of the Boundaries of its Brokerage System

Overview of Services Provided and Operations

Company Overview

IBG is an automated global electronic broker and market maker which includes IBG LLC custody and service accounts for hedge and mutual funds, registered investment advisors, proprietary trading groups, introducing brokers and individual investors. IBG LLC specializes in routing orders while striving to achieve best executions and processing trades in securities, futures, foreign exchange instruments, bonds and mutual funds on more than 120 electronic exchanges and market centers around the world.

For the purpose of the report, IBG refers to the following entities: Interactive Brokers LLC, IBKR Financial Services AG, Interactive Brokers Hong Kong Limited, Interactive Brokers Canada, Interactive Brokers (U.K.) Limited, Interactive Brokers Central Europe ZRT, Interactive Brokers Corp., Interactive Brokers (India) Private Limited, Interactive Brokers Securities Japan Inc., Interactive Brokers Australia Pty Limited, Interactive Brokers Luxembourg SARL Interactive Brokers Singapore Pte. Ltd. and Interactive Brokers Ireland Limited.

Overview of Services

IBG LLC's primary business segment is its electronic brokerage business.

Electronic Brokerage

As a direct market access broker, IBG serves the customers of both traditional brokers and prime brokers. IBG LLC provides customers with an advanced order management, trade execution and portfolio management platform at a very low cost. Customers can simultaneously access many financial markets worldwide and trade across multiple asset classes (stocks, options, futures, foreign exchange ("forex"), bonds and mutual funds) denominated in multiple currencies, on one screen, from a single account based in any major currency. Large financial advisor and broker-dealer customers may "white brand" the trading interface (i.e., make the trading interface available to their customers without referencing IBG's name), or can select from among modular functionalities, such as order routing, trade reporting or clearing on specific products or exchanges where they may not have up-to-date technology, to offer their customers a comprehensive, global range of services and products.

IBG performs the following services for its customers:

- Trade Clearing and Settlement
- Reconciliation and Control (custody and safekeeping of securities)
- Pricing and Valuation of Customer Positions
- Corporate Actions – Dividends and Reorganization Processing and Reconciliation
- Wire Transfer, Check Processing and ACH
- Customer Reporting

Customers initiate transactions electronically through a variety of processes. Transactions are processed directly into a specific order entry system either electronically through direct customer input, or to a much lesser extent by fully registered branch office personnel if necessary.

Security transactions referenced above are processed directly into IBG's trade processing, clearing and settlement systems. IBG LLC's Corporate Actions department processes dividends and reorganizations (i.e., tender offers, stock splits).

IBG LLC's Clearing and Control department also confirms that positions with custodians and internal ledgers are reconciled. Customer reporting, including electronic confirmation and statement reporting services, are also provided. Securities pricing is facilitated by the Technical Clearing Operations Group which confirms pricing data obtained from independent pricing vendors which is updated across IBG's internal firm and external customer reporting systems.

System Overview

Description of the Brokerage System

The following section describes the systems, included in the IBWeb application, utilized by the Company to support its business. IBG receives customer order requests from various sources and applications, trade confirmation information from various clearing corporations and depositories, and reference information relating to corporate announcements and pricing from external vendors. There are numerous systems involved in the processing of brokerage related transactions.

Significant computerized systems, included in the IBWeb application, supporting IBG's daily activities include:

System Name	Description
Credit Manager	Automatically confirms that customers have sufficient credit for transactions before orders are executed.
Trade Store	Utilized by Operations personnel as a repository of all trades.
Price Store	Utilized by Technical Clearing Operations personnel to store prices for securities.
ClearWeb	Utilized by Clearing Operations personnel as a repository of reports.
Real Time Trade Match (RTTM)	Utilized by Clearing Operations personnel to match all trades. All matched trades are transferred to IBG's books and records.
Centralized Position Reconciliation (CPR)	Utilized by Clearing Operations personnel to reconcile positions between IBG's books and records versus depository locations.
Dividend Reconciliation System	Utilized by Corporate Actions personnel to inquire, update, and review the status of dividends.
Corporate Actions System	Utilized by Corporate Actions personnel to maintain reorganization information.
Liquidation Monitor	Monitors that each customer account is properly funded and liquidates positions to maintain margin requirements.
Cashiering System	Utilized by Cashiering Personnel to enter and disburse checks, wires and ACH transactions.
CAST	Utilized by Customer Service and Compliance personnel as a repository for customer account information including customer agreements.
SWIFT	Utilized by Treasury personnel to process wire instructions and track payments.
IB Release	Program change management system used by the Information Technology group to track and approve program changes.
IB Inventory Management System	Utilized by Clearing Operations personnel to track and report on Broker to Broker trading activity.

System Name	Description
IB Reference Database	Trading products are set up in IB Reference Database.
CardServ	Utilized for the processing of Debit Card transactions.
Retail Equity Clearing	Among other functions, calculates customer interest margin and commission rates based on underlying market interest rates and agreed-upon commission rates, respectively.
Client Trading Platforms (TWS/WebTrader/Mobile/ Client Portal)	Trading platform utilized by the user entities.

Infrastructure

Strong authentication and access controls are implemented to restrict administrative access to the IBWeb application. Employees access the IBWeb application through their desktop on company supplied computers either through the local area network or by VPN using two-factor authentication if accessing remotely. IBG follows a formal process to grant or revoke employee access to IBG systems and the IBWeb application.

User access is restricted through the use of unique user IDs and strong passwords. Periodic reviews of access lists are implemented to help ensure access is appropriate and authorized. Access to production machines and network devices is managed via an access group management system and membership in these groups must be formally approved prior to the granting of access. IBG has processes in place to identify and remediate vulnerabilities. Both internal and external reviews are performed on a routine basis. Action plans to address identified findings are compiled and remediated by members of the IT group.

The hosting of IBG's database servers was outsourced to a third-party data center colocation provider, Equinix, Inc. The associated controls over physical and environmental protection of the servers are now overseen by Equinix. Change management policies are in place and procedures for tracking, testing, approving, and validating changes are formally documented. IBG requires all changes to be reviewed and approved by a separate technical resource, other than the developer, to evaluate the quality and accuracy of changes. All changes are also tested prior to their migration to the production environment.

People

IBG's organizational structure provides a framework for planning, executing, and controlling business operations. Executive and senior leadership play important roles in establishing IBG's tone and core values. The organizational structure assigns roles and responsibilities to provide for adequate staffing, security, and segregation of duties. Management has also established authority and appropriate lines of reporting for key personnel.

IBG follows a structured on-boarding process to familiarize new employees with IBG's tools, processes, systems, security practices, policies and procedures. Employees are provided with IBG's Employee Policies Manual, which details the Code of Conduct and Ethics, and additionally are required to complete annual security and awareness training to educate them as to their responsibilities concerning information security. IBG management actively monitors employee compliance with required training requirements.

Data

IBG provides controls at each level of data storage, access and transfer. IBG has established training programs for information security to support data confidentiality. All employees are required to complete these training programs annually. IBG has established incidence monitoring and response policies and processes to report and handle incident events related to confidentiality.

IBG establishes agreements, including non-disclosure agreements, for preserving confidentiality of information and exchanges with external parties.

Principal Service Commitments and System Requirements

IBG designs its processes and procedures related to the brokerage system to meet its objectives for services rendered. Those objectives are based on the service commitments that IBG makes to user entities, the laws and regulations that govern the provision of its technology services, and the financial, operational and compliance requirements that IBG has established for the services.

Security, availability, processing integrity, and confidentiality commitments to user entities are documented and communicated in service level agreements and/or other customer agreements. Security, availability, processing integrity, and confidentiality commitments are standardized and include, but are not limited to, the following:

- Security, availability, processing integrity, and confidentiality principles within the fundamental designs of the brokerage system that are designed to permit system users to access the information they need based on their role in the system while restricting them from accessing information not needed for their role;
- Use of encryption technologies to protect customer data;
- Restricting access to the system through the use of strong passwords and unique user IDs;
- Continuous monitoring of system performance and processing capacity;
- Secure and timely backup and retention of customer data;
- The complete, accurate, and timely processing of customer-initiated transactions within the system.

IBG establishes operational requirements that support the achievement of security, availability, processing integrity, and confidentiality commitments, relevant laws and regulations, and other system requirements. Such requirements are communicated in IBG's system policies and procedures, system design documentation, and contracts with customers. Information security policies and procedures define an organization-wide approach to how systems and data are protected. These include policies around how the service is designed and developed, how the system is operated, how the internal business systems and networks are managed, and how employees are hired and trained.

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