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**CPMI-IOSCO PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES**

**DISCLOSURE FRAMEWORK**

**BY**

**CENTRAL SECURITIES DEPOSITORY (GH) LIMITED**

**NOVEMBER, 2019**

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## Table of Contents

Table of Contents	i
Glossary of Terms	ii
I. Executive Summary	1
II. Summary of Major Changes since last update of the Disclosure	2
III. General Background of Central Securities Depository (GH) Limited	2
General Description of CSD (GH) in the Ghanaian Market	2
Services Provided by CSD (GH)	3
CSD (GH) Statistics	5
General Organisation of the FMI	7
Legal and Regulatory Framework	8
The Design and Operations of CSD (GH)	8
IV. Principle-by-Principle Summary Narrative Disclosure	10
V. List of Publicly Available Resources	17

## Glossary of Terms

ATS	Automated Trading System
BCP	Business Continuity Plan
BoG	Bank of Ghana
CMB	Cocoa Marketing Board
CPMI	Committee on Payments and Market Infrastructures
CPSS	Committee on Payment and Settlement Systems
CSD	Central Securities Depository
CSD (GH)	Central Securities Depository (GH) Limited
DR	Disaster Recovery
DvP	Delivery versus Payment
ERM	Enterprise Risk Management
FIX	Financial Information eXchange
FMI	Financial Market Infrastructure
GACH	Ghana Automated Clearing House
GFIM	Ghana Fixed Income Market
GhIPSS	Ghana Interbank Payment and Settlement Systems Limited
GIS	Ghana Interbank Settlement
GSD	Ghana Stock Exchange Securities Depository Limited
GSE	Ghana Stock Exchange
IOSCO	International Organisation of Securities Commission
ISA	Investor Service Account
ISO	International Organisation for Standardisation
KYC	Know Your Customer
MCSD	Millennium Clearing, Settlement and Depository System of CSD (GH)
OTC	Over-the-counter
PFMIs	Principles for Financial Market Infrastructures
Repo	Repurchase Agreement
RTGS	Real Time Gross Settlement
SEC	Securities and Exchange Commission, Ghana
sFTP	secure File Transfer Protocol
SSS	Securities Settlement System
SWIFT	Society for Worldwide Interbank Financial Telecommunication
T	Transaction Day

# DISCLOSURE FRAMEWORK

Responding FMI	: Central Securities Depository (GH) Limited.
Jurisdiction in which the FMI Operates	: Ghana
Authority overseeing the FMI	: Securities and Exchange Commission, Ghana
Date of disclosure	: November, 2019
This disclosure can be found at	: <a href="http://www.csd.com.gh">www.csd.com.gh</a>
Contact person for further information	: <a href="mailto:info@csd.com.gh">info@csd.com.gh</a>

## I. Executive Summary

This Disclosure document is prepared by the Central Securities Depository (GH) Limited (hereinafter referred to as CSD (GH)) in observance of Principle 23 of the CPSS-IOSCO report, *Principles for Financial Market Infrastructures (PFMI) (2012)*, which prescribes the disclosure of rules, key procedures, and market data to enable market participants to have accurate understanding of the risks and costs they incur by participating with the disclosing of Financial Market Infrastructure (FMI).

CSD (GH) is a limited liability company established in accordance with the Central Securities Depository Act, 2007 (Act 733), and incorporated under the Companies Code, 1963 (Act 179), which has been repealed and replaced by the Companies Act, 2019 (Act 992). Within the securities market in Ghana, CSD (GH) performs the dual role of a central securities depository (CSD) and a securities settlement system (SSS).

Previously there were separate depositories for equity and fixed income securities. These were merged in 2014 to form the CSD (GH). The merger in 2014 came with a number of enhancements, including:

- a single operating platform for recording of all securities;
- the use of central bank money to settle both equity and fixed income trades;
- the introduction of a negative affirmation<sup>1</sup> for trades by custodian banks; and
- the establishment of a Settlement Guarantee Fund.

CSD (GH) is regulated by the Securities and Exchange Commission of Ghana (SEC).

The CSD Act, 2007 (Act 733) provides the legislative basis for the operations of the central securities depository in Ghana. CSD (GH) has rules and procedures that offer clear guidelines on its operations. These are available to market participants and the general public on the CSD (GH) website.

The Rules and Procedures, formulated in line with the functions and powers of CSD (GH), detail the requirements and obligations of depository participants, and make provision for fees and charges to be levied by CSD (GH). In providing its securities depository and settlement services, CSD (GH) aims to promote the general safety of the investing public by ensuring that transactions are secure, fair, and transparent, and to promote efficiency in the country's securities market.

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<sup>1</sup> The concept of negative affirmation occurs if a Custodian Bank does not recognise the transactions performed for its clients by Brokers and Commercial Banks within a defined timeframe, otherwise the Custodian Bank has the option to reject a transaction which it does not recognise on behalf of its clients. This concept applies to trades involving clients of Custodian Banks.

CSD (GH) has instituted a risk management framework and a risk register for identifying, monitoring, and managing the risks likely to arise due to its operations. These are under continuous internal and external review. CSD (GH) maintains an insurance policy to cover business and operational losses. CSD (GH) engages all depository participants to ensure that they understand and are abreast with operations and procedure updates. CSD (GH) provides training and engages participants in stakeholder forums.

CSD (GH) has a seven-member Board of Directors appointed by the shareholders—Bank of Ghana and Ghana Stock Exchange—in accordance with the Board Charter. Board meetings are generally held quarterly with provision for extraordinary meetings when needed. The Board is generally responsible for reviewing and approving policies for implementation by the Executive Management team. To assist the Board in the performance of its duties, four Board committees have been set up. They are the Finance and Audit Committee, Business Conduct Committee, the Human Resource and Legal Committee, and the Risk Committee. The Risk Committee meets at least once every quarter, while all other committees meet at least twice in a calendar year. There is a charter for each of the Committees of the Board to guide its deliberations.

## **II. Summary of Major Changes since last update of the Disclosure**

This is the maiden disclosure by CSD (GH). It follows the Disclosure Framework laid down in CPSS-IOSCO’s “Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology (2012)”.

## **III. General Background of Central Securities Depository (GH) Limited**

### **General Description of CSD (GH) in the Ghanaian Market**

In 2004, the Bank of Ghana (BoG) established the first central securities depository (CSD) as an internal unit of the Bank. The unit was established purposely to serve as the official depository for debt securities issued by Government of Ghana (GoG), Bank of Ghana (BoG), and Ghana Cocoa Board (CMB). It maintained an official record of holders of securities and facilitated corporate auctions and redemptions when they fell due. The CSD was later on converted into a fully owned subsidiary of the Bank in 2010.

A second depository, the GSE Securities Depository Company Ltd (GSD) was established by the Ghana Stock Exchange (GSE) as a wholly-owned subsidiary in November 2008. The GSE-GSD was set up as a prerequisite for the implementation of an Automated Trading System (ATS) by the GSE to settle trades in dematerialised securities recorded on the ATS. In addition to providing a platform for the settlement of securities, the GSE-GSD also provided general safe keeping services for the dematerialised securities of companies listed on the GSE. As a separate legal entity, the GSE-GSD was licensed by the Securities and Exchange Commission of Ghana (SEC) to operate as a securities depository under the Central Securities Depository Act, 2007 (Act 733). In addition, the GSE-GSD also received a license from SEC to operate as a registrar of securities in the equity market.

In November 2010, the Bank of Ghana’s depository unit was registered as a limited liability company—the Central Securities Depository (GH) Limited—and operated as a fully-owned subsidiary of the Bank of Ghana. This wholly-owned subsidiary of BoG continued to render central safekeeping services, asset servicing, as well as clearing and settlement services for securities issued by GoG, BoG, and CMB.

In 2012, as part of measures to improve market efficiency, and subject to the recommendation of the Ministry of Finance in 2012, a process to merge the two depositories commenced. The merger was completed in 2014, resulting in the creation of a single depository for all categories of securities in the Ghanaian market. The

merger also resulted in the creation of additional features for the new depository. These features included: a change of the settlement bank for equities from a Commercial Bank to the Central Bank, thus enabling settlement of equities in central bank funds; the introduction of negative affirmation by Custodian Banks; and the establishment of a Settlement Guarantee Fund. The depository remains a limited liability company with the two shareholders, BoG and GSE, holding 70 percent and 30 percent shares, respectively, at the end of 2018 financial year. CSD (GH) is licensed and regulated by SEC to provide depository, clearing and settlement services. Although the Central Securities Depository Act, 2007 (Act 733) allows for securities to be issued and held in either dematerialized or certificated forms<sup>2</sup>, the securities in the depository system of CSD (GH) are in dematerialised form only.

CSD (GH) also has a license from the Securities and Exchange Commission to operate registrar services in the equity market. The registrar services of CSD (GH) is handled on a registrar system which is independent of the MCSD system used for the provision of depository, clearing and settlement activities. Under the registrar license, registrars operating in the market are permitted by the CSD Act, 2007 (Act 733) to hold equity securities in certificated forms. For effective reconciliation of the full register, CSD (GH) apprises the registrars on daily basis with information on the holders of the equity securities.

### **Services Provided by CSD (GH)**

The services offered by the CSD (GH) include the following:

#### **1. Clearing and Settlement services**

The operating system of CSD (GH) designated the Millennium, Clearing, Settlement, and Depository (MCSD) system, is interfaced with the Automated Trading System (ATS) of the Ghana Stock Exchange (GSE) and the Bloomberg Trading platform of the Ghana Fixed Income Market (GFIM). Trades that take place on both platforms flow to CSD (GH) for settlement. The MCSD further allows for direct reporting of OTC trades in debt securities and Repurchase Agreement (repo) transactions for settlement. In the repo market, CSD (GH) settled an amount of GH¢ 160.2 billion in 2018, being the settlement value of all the repo transactions carried out in that year using the CSD system. In the OTC market, the value of debt trades settled by CSD (GH) in 2018 was GH¢ 37.9 billion.

Presently, the repo services offered are in the form of secured or collateralised borrowing, instead of the classic repo under Global Master Repurchase Agreement (GMRA). Bank of Ghana and other stakeholders (i.e. CSD (GH), GSE and GFIM), recognising the limitations of this form of repo, have commenced an initiative to introduce repo under GMRA to the Ghana market in 2019.

Funds and securities are settled simultaneously using the Delivery versus Payment II (DvP II) method. The MCSD is interfaced with the real time gross settlement system (RTGS) of the BoG to facilitate settlement in central bank money. Funds settlement is done on a net basis at the BoG, while securities are delivered on a gross basis at the depository. Settlements at CSD (GH) are final and irrevocable. In addition to the DvP method of settlement, free of payment transfer services are performed by the CSD (GH).

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<sup>2</sup> Shares held in certificated forms are first dematerialised into the CSD system before an investor could trade the asset on the GSE bourse for settlement at CSD (GH). In other words, without dematerialisation of the share certificates investors cannot trade the underlying shares on the GSE bourse.

## **2. Securities Accounts**

CSD (GH) maintains securities accounts in conformity with section 28 (1) of the CSD Act, 2007 (Act 733) which makes it mandatory for any investor in book-entry securities to hold a securities account with the depository. The CSD appoints Depository Participants (DPs) who act as agents of the Depository and maintain a direct relationship with the investors. DPs also set up securities accounts with the depository. The securities accounts of the DPs are designated as proprietary accounts, and are required to be completely segregated from the accounts of the investors. Securities accounts for end investors can be set up as a nominee, omnibus or single beneficiary account. The depository provides general safe keeping services for securities accounts which include custody of securities, amendments of account registration details, and closure of the accounts, when required. CSD (GH) maintains a special category of accounts, Investor Services Account (ISA) for investors who hold 5% of any listed equity security. This is an optional service offered to investors by CSD (GH) at a prescribed fee. Under the ISA, though the beneficiary account holder has a direct relationship with the depository, the CSD (GH) cannot trade on the account. Anytime the beneficiary account holder intends to trade on the ISA account, instruction is given to CSD (GH) to transfer the shares to a preferred Broker and or a Custodian Bank to enable trading and settlement.

## **3. Corporate Action services**

The depository offers corporate action services for Issuers of both debt and equity securities. For GoG, BoG and CMB securities, the entitlement register is prepared by the depository and payment is made through the BoG RTGS system. The degree of corporate action services provided for other debt issuers, such as corporate organisations, is dependent on the contractual agreement between the depository and the issuers. In all cases of corporate action for debt securities, the depository will ensure that an Entitlement Register is provided. The services for debt securities include interest payments, maturity payments, and partial or early redemption of the securities.

CSD (GH) provides information for the portion of equity securities dematerialised to the Registrars during equity corporate action events. In Ghana, the Registrars are primarily responsible for administering corporate action events in the equity market. The depository ensures that the correct information on the record of equity securities dematerialised into the CSD system are delivered to the Registrars during Bonus and Rights issues, as well as Dividend Payments. CSD (GH), through its Registrar unit, also provides such services to its issuer clients for corporate actions.

## **4. Securities Transfer, Withdrawal, Pledges, and Conditional Transfers**

The other depository activities offered by CSD (GH) include the transfer of securities in the event of inheritance or bequest, among others.

Equity securities can be withdrawn from the depository as permitted by section 19 of the Central Securities Depository Act, 2007 (Act 733). However, withdrawals of government securities by depositors are prohibited by Section 19 (3) of the Central Securities Depository Act, 2007 (Act 733).

CSD (GH) allows for securities to be used as collateral for borrowing from financial institutions. These mostly take the form of Pledges and Conditional Transfers.

## 5. Registrar services

CSD (GH)'s Registrar Unit performs registrar services for a number of listed companies. The Registrar unit maintains the register for both certificated and dematerialised securities. The unit facilitates the dematerialization of securities. The unit also performs corporate actions i.e. dividend payments, bonus issues, rights issues, and securities split. It also facilitates Annual General Meetings for Issuers.

### CSD (GH) Statistics

#### Number of Depository Participants

- CSD (GH) has sixty six (66) Depository Participants as at August, 2019. This comprise twenty three (23) Commercial Banks, fifteen (15) Custodian Banks, ARP Apex Bank, twenty two (22) Brokerage Firms, Three (3) Investment Firms, the Social Security and National Insurance Trust (SSNIT), and the Bank of Ghana.

#### Number of Issuers

- The CSD (GH) holds fixed income securities issued by fourteen (14) Issuers, including Government of Ghana, Bank of Ghana, Cocobod, and other corporate organisations.
- The CSD (GH) holds shares issued by thirty eight (38) companies listed on the Ghana Stock Exchange.

#### Value of Securities Issued in the Debt Market

- A total face value of GH¢138 billion of securities was issued in 2018 and admitted into the depository system.
- The face value of new securities issued by Government of Ghana (GoG), Bank of Ghana (BoG), Cocobod and admitted into the depository in 2018 were GH¢ 42.4 billion, GH¢ 86.5 billion, and GH¢ 8.1 billion respectively (See table 1 below).

**Table 1: Summary Distribution of the Value of Debt Securities Issued by Issuers (2017-2018)**

Issuer	Face Value (GH¢)			No. of Times Issued		
	2017	2018	% Change	2017	2018	% Change
Bank of Ghana	207,074,239,545	86,464,915,181	(58.2)	99	101	2.0
Corporate Organisations	6,375,993,544	1,066,272,768	(83.3)	70	214	205.7
Cocobod	3,145,725,477	8,087,534,028	157.1	4	16	300.0
Government of Ghana	66,218,359,173	42,361,993,357	(36.0)	154	145	(5.8)
<b>Total</b>	<b>282,814,317,739</b>	<b>137,980,715,334</b>	<b>(51.2)</b>	<b>327</b>	<b>476</b>	<b>45.6</b>

#### Outstanding Debt Stock

- The face value of outstanding debt stock held in custody by the CSD (GH) for investors increased by 18.43 percent from GH¢ 68.4 billion in 2017 to GH¢ 81 billion in 2018.
- The percentage composition of the GH¢ 81 billion outstanding in 2018 was as follows: Government of Ghana securities, 77 percent; Bank of Ghana securities, 8 percent; Cocobod securities, 7 percent; and Corporate securities, 8 percent.



## **Holders of Outstanding Debt Instruments**

- Out of the GH₵ 81 billion outstanding stock, foreign and domestic investors held 34 percent and 66 percent, respectively.
- The value of securities held by domestic investors increased by 25 percent from GH₵ 42.7 billion in December 2017 to GH₵ 53.4 billion in December 2018.
- Holdings of foreign investors also increased by 7 percent from GH₵ 25.7 billion in December 2017 to GH₵ 27.6 billion in December 2018.

## **Corporate Action (Interest and Maturity Payments)**

- A total of GH₵ 144.3 billion was processed by the CSD (GH) as interest and maturity proceeds for payments by Issuers to 121,514 beneficiary investors.
- The GH₵ 144.3 billion proceeds was made up of GH₵ 10.2 billion and GH₵ 134.1 billion interest and maturity proceeds, respectively.
- The annual interest proceeds processed by the CSD (GH) on behalf of Issuers for payments increased by 47.8 percent from GH₵ 6.9 billion in 2017 to GH₵ 10.2 billion in 2018.
- However, the value of maturity proceeds processed by the CSD (GH) recorded a decline of 45.7 percent from GH₵ 265.8 billion in 2017 to GH₵ 144.3 billion in 2018.

## **Settlement of Secondary Trades involving Debt Securities**

- The number of trades settled through the CSD (GH) in 2018 was 82,820, a reduction of 22.8 percent compared to 107,219 trades settled in 2017.
- The settlement value of trades settled through the CSD (GH) increased by 23.4 percent from GH₵ 30.7 billion in 2017 to GH₵ 37.9 billion in 2018.
- Also, the face value of securities settled increased by 25.4 percent from GH₵ 28.7 billion in 2017 to GH₵ 36.0 billion in 2018.

## **Repurchase Agreement (Repo)**

- A total of 5,427 repo transactions were settled through the CSD (GH) in 2018 down from 5,618 repo transactions settled in 2017, a decline of 3.4 percent.
- The settlement value for the repo transactions increased to GH₵ 160.2 billion in 2018 compared to GH₵ 158.8 billion in 2017, a marginal increase of 0.9 percent.
- The annual repo rate declined to 16.98% p.a. in 2018 from 22.85% p.a. in 2017. The annual repo rate is the weighted average of all corresponding repo rates applied to repo transactions carried out within the year. The repo rate reflects the interest rate at which borrowing or lending happens in the repo market.

## **Pledges (Debt Securities)**

- The number of pledge transactions involving debt securities reduced by 2.0 percent from 1,739 in 2017 to 1,705 in 2018.
- There was also a reduction in the face value of securities used in pledged transactions by 1.28 percent from GH₵ 14.41 billion to GH₵ 14.23 billion in 2018.

## Clearing and Settlement of Equity Trades

- The number of equity trades settled by the CSD (GH) dropped marginally from 20,492 in 2017 to 20,406 in 2018. However, the volume of equity trades settled by the CSD (GH) declined significantly by 38.1 percent from 320.6 million in 2017 to 198.6 million in 2018.
- There was an upsurge of 28.1 percent in the value of settled equity trades from GH₵ 514 million in 2017 to GH₵ 658.3 million during 2018.

## General Organisation of the FMI

CSD (GH) has a seven-member Board of Directors appointed by the two shareholders, BoG and GSE, and taking due cognizance of their background. Board meetings are generally held quarterly, but there is a provision for extraordinary meetings when the need arises. The Board has four committees, comprising the following: Finance and Audit Committee; Business Conduct Committee; Human Resource and Legal Committee; and Risk Committee. The Risk Committee meets at least once every quarter, while the other committees meet at least twice a year. The business operations of the Board and its Board committees are governed by a Board Charter. The Board is responsible for reviewing and approving policies for implementation by the Executive Management team.

The Executive Management team comprises the Chief Executive Officer and the Deputy Chief Executive Officer, and it is accountable to the Board of Directors. For effective supervision and discharge of the daily activities of the depository, the Executive Management is assisted by four Departments— Finance and Administration Department, IT Department, Operations Department, and Economic and Risk Analysis (ERA) Department. The Heads of the Departments report directly to the Executive Management. The depository also has an Internal Auditor who is responsible for auditing all procedures and controls, and reports to the Board. Finally, the depository has a Legal Officer responsible for providing legal services and advice to the company, and also doubles as the Secretary to the Board.

The Operations Department is responsible for carrying out general depository activities. These include provision of clearing and settlement services, securities transfer services, securities accounts services (this includes opening of new accounts as well as maintenance and closure of existing securities accounts), among others, as previously explained on page 3 to 5 under Services Provided by CSD (GH). The Department also provides support to participants through training programmes that it organises.

Finance and Administration Department is charged with providing administrative, human resource and financial support to the whole organisation. Its duties include maintenance of financial records, procurement of goods and services, establishment and maintenance of contracts with third party vendors, and other administrative duties.

Economic and Risk Analysis Department was created to enhance the risk management practices in the operations of the Depository and also integrate economic analysis into its activities. The primary role of the department is to facilitate an enterprise wide risk management framework, provide market statistics, information security management, market surveillance, and monitoring and evaluation of projects earmarked for implementation by the Depository.

The Information Technology (IT) Department has responsibility for the efficient and effective management of the information systems, software, and the hardware of the company. The Department ensures that a secure access is available to all depository participants by monitoring access protocols and providing updated tools for communications. The Department also performs penetration and vulnerability assessment on its systems to determine potential risks to its business operations. The IT Department is additionally responsible

for the Business Continuity Plan (BCP) and Disaster Recovery plan (DR) of CSD (GH). The Department conducts simulation exercises at least twice a year to test the robustness of the BCP and DR plans. The simulation often includes market participants.

### **Legal and Regulatory Framework**

The Central Securities Depository Act, 2007 (Act 733) provides the legal framework for the business operations of the Depository in Ghana. As a participant in the Ghanaian securities market, the Depository observes all other legislations and regulations that have both direct and indirect effect on its activities and that of the participants. Paramount among these legislations and regulations are the Securities Industry Act, 2016 (Act 929) and the SEC Regulations, 2003 (LI 1728). The Depository and all its participants are incorporated under the Companies Code, 2019 (Act 992) and are required to adhere to the corporate governance policy provided therein. These legislations are to be read in conjunction with other applicable laws and or regulations.

CSD Act, 2007 (Act 733) also makes provision for the Depository to develop Guidelines, Rules, and Procedures for efficient and effective interactions and operations with its participants. The rules and procedures of CSD (GH) and all other regulatory documents are publicly available on the website ([www.csd.com.gh](http://www.csd.com.gh)).

To ensure adherence to the rules and procedures of the Depository, all Depository Participants sign a Participation Agreement with the CSD (GH) prior to their appointment as Depository Participants. The Participation Agreement requires DPs to comply with the AML/CFT laws. The Participation Agreements between the Depository and its individual depository participants, the Rules and Procedures, and the CSD Act, 2007 (Act 733) together form a Master Agreement that is enforceable between the Depository and its participants and between the participants themselves.

### **The Design and Operations of CSD (GH)**

CSD (GH) operates a web-based application system called Millennium Clearing Settlement and Depository (MCSD) system, and all market participants have been granted real time access to it. The MCSD is open on weekdays from Monday to Friday at 9:30 am for market transactions by Depository Participants. The closing time for the MCSD is activity specific. It closes at 3.00 pm for equity transactions executed through the ATS, and 4.00 pm for debt trades. Participants may perform all other depository activities, including securities account opening for end investors, until the MCSD closes at 5:00 pm. Settlement for equity transactions occurs on T+3 at 2.00 pm while debt trades settle on T+2 at 4.20 pm. Settlement for both debt and equity transactions are fixed batch settlements. Transactions involving repurchase agreements (repo) are settled in real time and on a gross (one-to-one) basis from 9.30 am to 5.00 pm. The MCSD allows Custodian Banks to negatively affirm transactions performed for custodian clients by Brokers and Dealers in both the equity and debt markets within a defined period. Custodian Banks have up to 4.30 pm on T+1 to confirm debt trades executed for their clients by Brokers and Commercial Banks, and up to 12.30 pm on T+2 for equity trades done by Brokers for their clients.

The MCSD is interfaced with the ATS, the Bloomberg Trading Platform, and the RTGS for the seamless flow of trade data to the Depository for final delivery of securities and funds settlement. The MCSD generates real time settlement obligations in the format of a settlement report for the respective Depository Participants. On the settlement day, an electronic payment file is generated by the MCSD to BoG for simultaneous payment of fund and delivery of securities at 2.00 pm for equity trades, and 4.20 pm for debt

trades. CSD Ghana uses the DvP II model of settlement—Funds are settled on a net basis and securities are delivered on a gross basis.

Depository Participants are responsible for settling their trade obligations. On the settlement day, Depository Participants are expected to make funds available through the RTGS before the settlement time lines to facilitate settlement. Non-Bank Depository Participants, such as Brokers and Custodian Banks, are required to appoint a Settlement Partner (i.e. a Commercial Bank) to complete their funds settlement at Bank of Ghana. These non-bank Depository Participants are also required to arrange credit lines with their Settlement Partners to ensure that funds settlement is always completed.

A non-bank depository participant is required to submit a signed copy of a settlement partner agreement with a Commercial Bank before its appointment to the depository. CSD (GH) does not grant any intraday liquidity support facility to depository participants. However, where a depository participant is unable to provide funds for settlement, the Settlement Guaranteed Fund (SG) will be invoked for settlement. The size of the fund as end-June 2019 was GH¢ 2.5 million.

#### IV. Principle-by-Principle Summary Narrative Disclosure

##### A Brief Assessment of Observance of CSD (GH) as a CSD and SSS

<b>Principle 1 : Legal Basis</b>	
An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.	
Description.	CSD (GH) is a limited liability company which operates only in Ghana. It is established to perform depository, clearing and settlement functions in the securities market of Ghana. It also has a license to operate Registrar services for the equity market. CSD (GH) is regulated by the SEC and its activities are in conformity with the Central Securities Depository Act, 2007 (Act 733), the Companies Code, 2019 (Act 992), and regulations issued by the SEC, the Bank of Ghana and other regulatory bodies.
<b>Principle 2 : Governance</b>	
An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.	
Description	The governance arrangements of CSD (GH) meet the requirements of the Companies Act, 2019, (Act 992) and the Guidelines on Corporate Governance issued by the SEC. CSD (GH) has a seven-member Board of Directors, composed of the Chief Executive Officer and six non-executive Directors, including the Chairman. . The Board has a Charter to guide its work and has constituted various Committees including the Risk, Human Resource and Legal, Finance and Audit, and Business Conduct committees. There is an internal audit system for auditing its activities. The primary focus of the governance arrangement of CSD (GH) is to serve and protect the interest of investors through transparent, efficient and effective service delivery. CSD (GH) has a User Group Forum to hold periodic meetings with market participants to discuss and solicit comments on proposed policies and amendments to existing rules or procedures, among others. Any amendments to the Rules of CSD (GH) are submitted to SEC for approval before becoming effective. Key information affecting the investment community are published on the website of the Depository and also in national newspapers and other relevant communication channels.
<b>Principle 3: Framework for the comprehensive management of risks</b>	
An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.	
Description	<p>In discharging its objectives, CSD (GH) is cognisant of the fact that it is faced with a broad range of risks, as would affect any financial market infrastructure with similar activities. These risks include legal risk, liquidity risks, general business risks, IT-related risks, and operational risks, among others.</p> <p>CSD (GH) has a risk management plan that includes the development, compilation and continuous update of its risk register. The controls in place to address the risks include: (i) a continuous update of its rules and procedures to ensure its compliancy</p>

	<p>and enforceability in Ghana; (ii) maintenance of the Settlement Guarantee Fund to facilitate settlement; (iii) a sound information security management system consisting of a comprehensive BCP and DR Plan, and the maintenance of its ISO 27001 certification; and (iv) maintenance of an insurance policy to cover business and operational losses.</p>
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**Principle 4: Credit risk**

An FMI should effectively measure, monitor, and manage its credit exposure to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more-complex risk profile, or that which is systemically important in multiple jurisdictions, should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two largest participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain, at a minimum, total financial resources sufficient to cover the default of the one participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

<p>Description</p>	<p>This Principle is not applicable to the operations of CSD (GH).</p> <p>CSD (GH) faces very limited credit risk in its operations. CSD (GH) does not act as counterparty to any of participants in transaction; it does not extend any form of credit facility to the Depository Participants or any of its stakeholders. Depository Participants undertake to adequately fund their accounts to facilitate settlement of their transactions. CSD (GH) maintains a Settlement Guarantee Fund, to which DPs and CSD (GH) have contributed, to support settlement where a Depository Participant is unable to meet obligations. Other than its contribution to the SGF, CSD (GH) is not exposed to credit risk from participants.</p> <p>In undertaking corporate action activities, CSD (GH) only acts as a calculating agent for events such as interest and maturity payments; it is not a paying agent.</p> <p>Exposures faced by the Depository Participants are managed independently of the CSD (GH). To address this level of exposure among the DPs, the Rules and Procedures of the CSD have been structured to reduce or eliminate counterparty risk among the DPs, particularly during the clearing and settlement processes of CSD (GH). As part of the requirements, limits are placed on the trading activities of Depository Participants, and non-bank participants have to appoint and maintain credit lines with commercial banks as their settlement partners. Settlement is achieved through the usage of the DvP 2 model which ensures that there is simultaneous payment of funds and delivery of securities using central bank money.</p>
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<b>Principle 5: Collateral</b>	
An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.	
Description	<p>This Principle is not applicable to the operations of CSD (GH).</p> <p>CSD (GH) faces limited credit exposure and does not require collateral or any form of guarantee in its dealings with the Depository Participants. The Settlement Guarantee Fund which is managed by CSD (GH) is solely made up of cash contributions. In transactions such as repurchase agreements and pledges, CSD (GH) is not exposed in terms of the collateral used. This is because these transactions are purely bilateral transactions, and CSD (GH) only provides the platform to enable DPs execute their transactions for real time settlement. The parties involved in the repo transactions are allowed to apply the appropriate haircut to manage their exposures.</p>
<b>Principle 6: Margin</b>	
A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.	
Description	This Principle is not applicable to the operations of CSD (GH). It only applies to CCPs.
<b>Principle 7: Liquidity risk</b>	
An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.	
Description	<p>CSD (GH) does not pose or experience liquidity risk from its participants. However, participants may have liquidity risk against each other during clearing and settlement of trades. CSD (GH) has established the SG Fund to address any liquidity challenges likely to be associated with the clearing settlement arrangements of the CSD. The SG Fund was set up in 2016 as a joint venture between the Depository and its participants. All new participants are required to contribute to the SG Fund. The initial amount of the Fund was GH¢ 1.0 million. This amount has increased to about GH¢ 2.5 million through investments in Government of Ghana securities, additional contributions from existing Depository Participants, CSD (GH), and contributions from other newly appointed Depository Participants. The administration of the SG Fund is governed by the Settlement Guarantee Guidelines. The Guidelines provide information on when and how the SG fund can be used.</p>

<b>Principle 8: Settlement finality</b>	
An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.	
Description	There are two main settlement cycles in the MCSD: equities are settled on a T+3 cycle at 2.00 pm, while debt securities are settled on a T+2 cycle at 4.20 pm. However, participants are allowed to choose a settlement cycle shorter than T+2 and T+3 for transactions involving both debt and equity securities. Settlement is final and irrevocable when securities move in the CSD system.
<b>Principle 9: Money settlements</b>	
An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.	
Description	All CSD (GH) funds settlements are conducted in central bank money. All Depository Participants that are not banks on the RTGS appoint a Settlement Partner which is a commercial bank to ensure that funds settlement is completed in central bank money.
<b>Principle 10: Physical deliveries</b>	
An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities, and should identify, monitor, and manage the risks associated with such physical deliveries.	
Description	This Principle is not applicable to the operations of CSD (GH).  CSD (GH) holds securities only in book entry form. The proportion of equity securities which are yet to be dematerialized in the Ghana market are held by the Registrars in their registers which are independent of the CSD system. The Registrar Unit of the CSD (GH) is one of such Registrars licensed by the SEC to operate a Registrar business in Ghana.
<b>Principle 11: Central Securities Depositories</b>	
A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues, and minimize and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilized or dematerialized form for their transfer by book entry.	
Description	All securities within the Depository are kept in dematerialized form using the book entry accounting method. In other words, no certificate is held by the CSD system. The Depository performs daily reconciliation to ensure that its records of the book entry securities and the Issuer's records are identical. The Depository's rules, procedures and internal controls protect the integrity of existing securities and prevent the unauthorized creation of new securities. Securities accounts are not allowed to be overdrawn or have negative balances.



<b>Principle 12: Exchange-of-value settlement systems</b>	
If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.	
Description	Settlement is done on a DvP II basis. Funds are settled on a net basis and securities are settled on a gross basis. During the settlement process, securities are delivered on condition that payment of funds has occurred. In December 2018 CSD (GH) introduced Free of Payment transfers as part of its settlement functions in addition to DvP settlement.
<b>Principle 13: Participant-Default Rules and Procedures</b>	
An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.	
Description	The clearing and settlement rules of the Depository defines a defaulter participant as a participant who, having been suspended or restricted by the Depository, fails to comply with a loss notice sent to the said participant. A defaulter participant will have their access to the MCSD terminated. A manager will be appointed for the securities account of the defaulter participant.
<b>Principle 14: Segregation and portability</b>	
A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.	
Description	This Principle is not applicable to the operations of CSD (GH). It only applies to CCPs.
<b>Principle 15: General business risk</b>	
An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.	
Description	CSD (GH) holds liquid net assets funded by equity and reserves in excess of more than one year's operational expenses. These holdings of net liquid assets are considered to be sufficient to maintain critical operations in the event of a recovery or wind-down.
<b>Principle 16: Custody and investment risks</b>	
An FMI should safeguard its own and its participants' assets and minimize the risk of losses on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.	
Description	The Depository's assets are segregated from the assets of its participants. The Depository's investments are in Government of Ghana risk-free securities.

<b>Principle 17: Operational risk</b>	
An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability, and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.	
Description	CSD (GH) manages risks on an enterprise-wide basis. It has compiled a risk register which is continuously updated. The Depository's information security management system is certified under ISO 27001:2013. CSD (GH) has BCP and DR plans which are tested periodically. As part of its BCP, the Depository has an emergency operating office which is fully equipped to provide services in the event of any major disruption at its production site.
<b>Principle 18: Access and participation requirements</b>	
An FMI should have objective, risk-based, and publicly-disclosed criteria for participation, which permits fair and open access.	
Description	CSD (GH) has clear provisions in its Rules for appointment of Depository Participants, in line with the requirements contained in the Central Securities Depository Act, 2007 (Act 733). The participation requirement is mainly to ensure that participants joining the Depository can settle their obligation, carry on business as going concerns, and practice sound risk management and good corporate governance to prevent disruptions to the Depository's activities.
<b>Principle 19: Tiered participation arrangements</b>	
An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.	
Descriptions	This Principle is not applicable to the operations of CSD (GH).  The Rules of CSD (GH) does not make provision for tiered participation arrangements. In the Participation Agreement signed between CSD (GH) and the Depository Participants, CSD (GH) does not assume any direct relationship with the clients of the Depository Participants. The Depository Participants are, therefore, responsible for managing the risks posed by their clients. CSD (GH) operates both segregated and omnibus or nominee account structures. For segregated account holders, CSD (GH) has basic information on the beneficiary investors in the CSD (GH) system but not that of omnibus account or nominee account structure. In the case of nominee accounts, the Securities and Exchange Commission has market guidelines for regulating the activities of such accounts.
<b>Principle 20: FMI links</b>	
An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.	
Description	This Principle is not applicable to the operations of CSD (GH).  CSD (GH) does not have links with other CSDs.

<b>Principle 21: Efficiency and effectiveness</b>	
An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.	
Description	<p>CSD (GH) has a 5-year strategic plan spanning the period 2014 – 2019. This plan was developed with inputs from major market stakeholders and all depository participants. A process to develop a new 5-year strategic plan commenced in July 2019.</p> <p>The Business Conduct Committee (BCC) of the Board of CSD (GH) has representation from two of the major categories of depository participants (i.e. Ghana Securities Industry Association and National Association of Bankers). The BCC plays a major role in ensuring that participants have direct access to the depository’s Board.</p>
<b>Principle 22: Communication procedures and standards</b>	
An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.	
Description	CSD (GH) uses SWIFT and FIX standards for communicating to the RTGS for funds settlement and the ATS, respectively. Communication with participants is by Secure File Transfer Protocol (sFTP).
<b>Principle 23: Disclosure of rules, key procedures, and market data</b>	
An FMI should have clear and comprehensive rules and procedures, and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.	
Description	The rules, procedures, fee structure, and other relevant documents are publicly available on the Depository’s website ( <a href="http://www.csd.com.gh">www.csd.com.gh</a> ). CSD (GH) requires mandatory training for new participants and refresher training programs for existing users. Participants are also consulted for their inputs on any proposed changes to relevant rules and procedures.
<b>Principle 24: Disclosure of market data by trade repositories (TR)</b>	
A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.	
Description	This Principle is not applicable to the operations of CSD (GH). It only applies to Trade Repositories.

## V. List of Publicly Available Resources

S/N	Name of Document	Document in Existence	For Publication YES/NO
1	Agency Agreement	Yes	No
2	Agreements between CSD (GH) and major Stakeholders (i.e. BOG and GSE)	Yes	No
3	Annual Report – 2018	Yes	Yes
4	Asset Register	Yes	No
5	Audit and Finance Committee Charter	Yes	No
6	Bankers Indemnity	Yes	No
7	Banks and Specialised Deposit-Taking Institutions Act, 2016 (Act 930)	Yes	Yes
8	Board Charter	Yes	No
9	Borrowers and Lenders Act, 2008 (Act 773)	Yes	Yes
10	Business Continuity Plan	Yes	No
12	Central Securities Depository Act, 2007 (Act 733)	Yes	Yes
13	Charter for Board Committees	Yes	No
14	Clearing and Settlement Rules	Yes	Yes
15	Companies Act, 2019 (Act 992)	Yes	Yes
16	Corporate Governance Guidelines on Best Practice by Securities and Exchange Commission of Ghana	Yes	Yes
17	Central Securities Depository Act, 2007 (Act 733)	Yes	Yes
18	Central Securities Depository (GH) Organogram	Yes	No
19	Central Security Depository's Operational Procedures	Yes	Yes
20	Central Securities' Operational Rules	Yes	Yes
21	DP Participation Agreements	Yes	No
22	Employers Liability	Yes	No
23	Enterprise Risk Management Framework	Yes	No
24	Fees, Charges and Penalties	Yes	Yes
25	Foreign Exchange Act, 2006 (Act 723)	Yes	Yes
26	Group Personal Accident Cover	Yes	No
27	Internal Audit Plan	Yes	No
28	Investments Policy	Yes	No
29	ISO/IEC 27001:2013 Certification	Yes	No
30	Monthly Bulletin	Yes	Yes
31	Non-Bank Financial Institutions Act, 2008 (Act 774)	Yes	Yes
32	Professional Indemnity	Yes	No
33	Public Liability Insurance Cover	Yes	No
34	Risk Committee Charter	Yes	No
35	Risk Framework	Yes	No
36	Risk Register	Yes	No
37	SEC Guidelines on Nominee Accounts	Yes	Yes
38	Securities and Exchange Commission Regulations, 2003 (LI 1728)	Yes	Yes
39	Securities Industry Act, 2016 (Act 929)	Yes	Yes

<b>S/N</b>	<b>Name of Document</b>	<b>Document in Existence</b>	<b>For Publication YES/NO</b>
40	Service Level Agreements with service providers	Yes	No
41	Settlement Guarantee Fund Guidelines	Yes	Yes
42	Strategic Plan 2014 -2019	Yes	No
43	Vehicle Insurance	Yes	No