Nasdaq Dubai
Disclosure Framework

Contents

Financial Market Infrastructure	Nasdaq Dubai Limited (Nasdaq Dubai)
Jurisdiction	Dubai International Financial Centre (DIFC)
Regulator	Dubai Financial Services Authority (DFSA)
Disclosure Date	September 2020

This disclosure can be found on
https://www.nasdaqdubai.com/exchange/regulatory-framework/qccp

I. Executive summary

This section should summarise the key points from the disclosure framework, including a brief overview of the FMI, its participants, its legal and regulatory framework, its primary risks, and its key risk management and other relevant practices.

This disclosure framework is prepared in accordance with the Principles for financial market infrastructures: Disclosure framework and Assessment methodology document dated December 2012.

The objective of this disclosure framework is to provide sufficient disclosure to market participants with respect to Nasdaq Dubai's Clearing house (hereinafter referred to as "Nasdaq Dubai CCP"); its role as a central counterparty and its management of different types of risk. Currently, the clearing activities performed by Nasdaq Dubai CCP pertain to the Nasdaq Dubai Equities and Derivatives Markets.

Nasdaq Dubai is licensed by the Dubai Financial Services Authority (DFSA) as an Authorised Market Institution (AMI) to provide the financial services of "Operating an Exchange" and "Operating a Clearing House".

Nasdaq Dubai's participants on its facilities can be categorized into 3 categories below. The minimum capital requirement imposed by Nasdaq Dubai on participants varies based on membership type. In addition, Nasdaq Dubai has appointed settlement banks based in the UAE for clearing and settlement of cash obligations arising from transactions on Nasdaq Dubai.

- **Trading Member (TM)**: A TM simply executes trades which are cleared and settled by a General Clearing Member.
- **Individual Clearing Member (ICM)**: An ICM executes trades. It can also clear and settle its own trades.
- **General Clearing Member (GCM):** A GCM executes trades and can clear and settle them, as well as clear and settle the trades of Trading Members.

  In addition, Nasdaq Dubai CCP also offers a direct clearing model to certain Derivatives clients. This is known as Direct Clearing Customer (DCC) and is defined as a customer of a Derivatives Trading and Clearing Member, approved by Nasdaq Dubai to act as counterparty in respect of clearing proprietary derivative transactions executed within a segregated clearing account opened in accordance with the Nasdaq Dubai Business Rules.

Material risks are identified in the Risk Management Framework by considering potential impact on ongoing operations of Nasdaq Dubai as a going concern. Amongst other risks, failure to maintain the Clearing Guarantee Fund at sufficient level has been identified. This may expose Nasdaq Dubai and other non-defaulting Clearing Members to credit risk if any Member defaults on its obligation. Since clearing of Equities and Derivatives products is performed by Nasdaq Dubai, it should be noted that the counterparty clearing guarantee relates to the period from when the transactions are executed on Nasdaq Dubai as an exchange, or registered with Nasdaq Dubai as an exchange, until the obligations relating to the transactions are settled, i.e. payments are made and securities are delivered.

Other risks such as reputational risk, liquidity risk, legal risk, market risk and replacement risk are closely related to clearing counterparty risk and potentially have a material impact on overall risk profile of Nasdaq Dubai CCP.

II. Summary of major changes since the last update of the disclosure

This section should summarise the major changes to the FMI's organisation, services, design, rules, markets served and regulatory environment since its last disclosure. The FMI should note the sections in its disclosure where such changes are reflected.

There were no major changes to Nasdaq Dubai's organization, services, design, rules, markets served and regulatory environment since our last disclosure.

III. General background on the FMI

General description of the FMI and the markets it serves

This section should provide basic, concise descriptions of the services offered and functions performed by the FMI. It should also provide an overview of the markets the FMI serves and the role it fulfils within those markets. Further, the section should include basic data and performance statistics on its services and operations. An FMI should provide, for example, basic volume and value statistics by product type, aggregate intraday exposures of the FMI to its participants, and statistics on the FMI's operational reliability.

Nasdaq Dubai is the international financial exchange in the Middle East. It allows companies to benefit from a unique investor pool that combines regional and international wealth, making it a globally unique platform for companies to raise money and for investors to find exciting opportunities.

For Equity trades executed on the exchange, efficient mechanisms must be in place to transfer the shares to the buyer, and the money to the seller. These transfers, known as clearing and settlement, take place through Clearing Members, which make use of infrastructure provided by Nasdaq Dubai. The exchange operates a T+2 settlement cycle, which means that trades should normally be settled two days after a trade has been agreed.

Nasdaq Dubai acts as a CCP for both Equities and Derivatives markets. As a CCP, novated transactions are required to be settled by the CCP even if Clearing Member fails to settle their obligations. This can incur large credit exposures on settlement days, when the full principal value of transactions may be at risk. In 2019, the total value of Equities traded was USD 1,613,331,177. For Derivatives, a total of 1,767,828 contracts were traded at a value of USD 105,661,872. Intraday exposure is calculated based on margin calls over a period of time divided by number of trading days. Since Nasdaq Dubai uses bank guarantees and cash as collateral to manage risk, the intraday level exposure of Nasdaq Dubai CCP for both Equities and Derivatives is negligible.

One of the key tools used to manage credit exposure is the requirement for margining and high quality collateral in the form of bank guarantees and/or cash. Another tool used is netting. All open positions of an account are netted on a continuous basis. This means that a position entered on an account, from a risk perspective is netted by any corresponding but opposite positions in the same security at the same account, and will be expressed as a single net position whenever possible, i.e. the Net Open Balance.

Nasdaq Dubai also maintains a Clearing Guarantee Fund (CGF) to mitigate any shortage of margins to meet its CCP obligation in market. This fund is drawn upon if there is any shortage after liquidating all available assets and collaterals provided by a defaulting Member. The adequacy of such CGF is stressed tested at regular intervals and each time upon adding new product or business lines. In addition to this, adequate credit lines are maintained by CCP to manage short term liquidity.

Nasdaq Dubai is required to comply with the operational efficiency and resilience requirements set out in section 5.5 of the DFSA AMI module. Quantitative reliability objectives, for example, in regards to timelines within which participants can expect Nasdaq Dubai to processes requests have been detailed in Member Operating Procedures. Participants are advised on when they can expect different activities such as securities and cash credits as part of settlements, processing of transfer requests to be completed.

Qualitative reliability objectives are set on critical systems to ensure operational continuity. Systems are set to provide an uptime of 99%, and this is, achieved through the use of hardware redundancies, as well as data backup and real time replication. In the case of trading and clearing systems, for example, Nasdaq Dubai utilises a combination of auto failover systems as well as real time data replication at the disaster recovery facility.

General organisation of the FMI

This section should provide an overview of the organisational and governance structure of the FMI, including a description of the FMI's governance policies, governance structure and management structure.

Nasdaq Dubai currently has a corporate governance framework appropriate to the nature, scale and complexity of its business and structure, which allows it to exercise sound and prudent management and oversight of its business and protect the interests of its stakeholders.

The Board of Nasdaq Dubai monitors the performance against the goals, objectives and targets stated in strategic plans, annual plans, and budgets, and may benchmark Nasdaq Dubai's performance against peer companies. Three Committees have been established to provide recommendations to the Board. The Board Committees assist the Board in overseeing the functions and performance of management. There are currently three Committees that have been established including the Audit and Risk Management Committee, Market Oversight Committee, and a Nomination and Remuneration Committee.

The Audit and Risk Management Committee independently and objectively oversees the Company's internal control and management systems, internal compliance, governance issues, financial reporting, external and internal auditors and financial controls; the Market Oversight Committee provides independent oversight of the Company's regulatory functions, including its surveillance, compliance and enforcement functions as well as other regulatory functions carried out by Nasdaq Dubai. And the Nomination and Remuneration Committee provides independent oversight relating to appointment and remuneration matters of the directors and senior management.

Nasdaq Dubai is required at all times to have individuals performing the functions of: Governing Body; Senior Executive Officer; Operations Officer; Finance Officer; Compliance Officer; Risk Officer; Money Laundering Reporting Officer; and Internal Auditor.

More information on Nasdaq Dubai Corporate Governance framework can be found on:

https://www.nasdaqdubai.com/exchange/about-us/corporate-governance

Legal and regulatory framework

This section should provide an overview of the FMI's legal and regulatory framework, including the legal and ownership structure of the FMI, the legal basis for each material aspect of the FMI's activities, and the regulatory, supervisory and oversight framework for the FMI.

Established in the Dubai International Financial Centre (DIFC) on 29 September 2004 as a Private Company, Nasdaq Dubai is an Authorised Market Institution (AMI) licensed by the Dubai Financial Services Authority (DFSA) to operate an Exchange and operate a Clearing House. The shareholders of Nasdaq Dubai are Borse Dubai Limited and Dubai Financial Market PJSC.

The DIFC Regulatory Law 2004 and the Markets Law 2012 provide the framework for the licensing and supervision of Authorised Market Institutions.

Furthermore, the DFSA General (GEN) module prescribes the Financial Services which may be carried on by an Authorised Firm or Authorised Market Institution and the detailed requirements that must be met by such firms. Also, the DFSA Regulatory Policy and Process (RPP) Sourcebook contains, amongst other things, the detailed policies and procedures relating to how the DFSA exercises its licensing and supervisory functions relating to Authorised Market Institutions.

In addition, Nasdaq Dubai is subject to applicable regulations of the DFSA including but not limited to the AMI Module, Market Rules and the Anti-Money Laundering, Counter-Terrorist Financing and Sanctions Module (AML) Module. With regards to money laundering and terrorism financing, Nasdaq Dubai is also required to adhere to the following UAE laws:

1. UAE Federal Decree-law No.20 of 2018 on Anti-Money Laundering and Combating the Financing of Terrorism and Financing of Illegal Organisations;
2. UAE Federal Law No. 7 of 2014 on Combating Terrorism Offences;
3. Cabinet Decision No. 10 of 2019 concerning the implementing regulation of Decree Law No. (20) of 2018 on Anti- Money Laundering and Combating the Financing of Terrorism and Illegal Organisations; and
4. The UAE Penal Code.

The DFSA AMI Rulebook requires Nasdaq Dubai to have clear and fair rules which are legally enforceable against its Members, published and made freely available. The clarity, fairness and enforceability of

Nasdaq Dubai’s rules have been considered and deemed appropriate by DFSA in the initial and continuing authorisation of Nasdaq Dubai as an Authorised Market Institution.

Nasdaq Dubai’s legal framework is clearly articulated in its rules and procedures which are published and readily available on its website and in the contractual agreements with its participants. The legal framework in the DIFC directly supports provisions related to finality of transactions. In addition, prior to any proposed changes to the rules, Nasdaq Dubai may conduct a public consultation to explain the reasons for the proposed changes and provides participants with the opportunity to comment.

System design and operations

This section should explain the FMI’s design and operations. It should include a clear description of the typical lifecycle of the transaction process. The information should highlight how the FMI processes a transaction, including the timeline of events, the validation and checks to which a transaction is subjected, and the responsibilities of the parties involved.

Nasdaq Dubai’s Clearing House is the central counterparty to all on-exchange trades executed on the Nasdaq Dubai trading system and which are eligible to be cleared with Nasdaq Dubai. All transactions accepted for clearing and settlement are novated. In other words, Nasdaq Dubai becomes the ‘buyer’ to every ‘seller’ and the ‘seller’ to every ‘buyer’.

The following systems are used to support clearing and risk management on Nasdaq Dubai:

- TCS Bancs clearing system for Derivatives Collateral Management and generating Margin calls. The clearing system is used for trade enrichment, real-time position management, real-time generation of cash settlement obligation, interfacing with Banks via swift, interfacing with SPAN for Intraday and end of day margining.
- CME SPAN system to calculate Initial margins for Derivatives; CME SPAN RMC is a risk management tool licensed from Chicago Mercantile Exchange (CME). It is used to capture the trading data and positions from the clearing system and calculate margins based on the set parameters.
- Nasdaq Dubai Matching Engine system developed by Nasdaq is used for applying order limits, price thresholds, and share or cash pre-validation where applicable for orders in the market. Nasdaq Matching Engine is also used by the market control team to monitor orders, thresholds, significant price movements and user access.
- Nasdaq PCCP system is used to capture Equity and Fixed Income trade information and calculate margins.
- Nasdaq Equator system is used to capture Equity trade information and calculate real-time security and cash obligation for settlement day. The Equator system is also used to handle post trade settlement activities and depository services such as holding balances and servicing corporate actions.

Life cycle of the transaction:

Members may enter buy orders up to the value of its “settlement cap”. The settlement cap is the value of the bank guarantee and/or cash deposited with Nasdaq Dubai in a designated Margin account to meet its margin requirement. All buy trades of an Individual Clearing Member are validated against its settlement cap. All buy trades of Trading Members are validated against the General Clearing Member's settlement cap. Additionally, pre-validation is imposed on sell orders placed from trading accounts which means that the entire amount of securities need to be present in the account at the time of order placement.

Transactions matched on exchange are reported to Nasdaq Dubai CCP for clearing. Nasdaq Dubai Members are expected to maintain sufficient collateral pre-trading where required and meet any margin calls before trading begins on the next valid trading day.

For Derivatives, each Clearing Member's Margin requirement will be calculated at least every Business Day following the close of trading for that day and, where applicable a Margin call will be made. In addition, Variation Margin Settlement or mark to market settlement is designed to reflect the accrued unrealized profits or losses on the unsettled traded positions. The Variation Margin will be calculated for all unsettled traded positions where profits and losses will be netted. Nasdaq Dubai will calculate Variation Margin or any other payment (or receipt) of obligation for Admitted Derivative contracts on daily basis at end of Business Day. A Clearing Member shall ensure that these are daily settled at 10:30 next Business Day.

Direct Clearing Customers participate directly in the clearing of their transactions executed on the exchange as counterparty to the clearing house within the requirements of the Business Rules. DCCs have separate positions, margin and asset accounts in Nasdaq Dubai clearing system.

For Equities, Clearing Members are required to maintain sufficient collateral before trading and to cover any margin calls by the next business day. Settlement is on a T+2 cycle where Clearing Members must settle cash and securities by 12pm on Settlement Day.

IV. Principle-by-principle summary narrative disclosure

This section should provide a summary narrative disclosure for each applicable principle with sufficient detail and context to enable a reader to understand the FMI's approach to observing the principle.

Principle 1: Legal Basis
An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

The activities of Nasdaq Dubai's CCP that require a high degree of legal certainty are:

- The CCP to act as counterparty, including the legal basis for novation or open offer;
- The timing of assumption of liability as CCP;
- Netting arrangements;
- The CCP's interest in collateral (including margin) that a participant pledges or transfers to the CCP;
- Default procedures;
- Finality of transfers of funds and financial instruments; and

The relevant jurisdiction for the material aspects mentioned above is the DIFC notwithstanding that Nasdaq Dubai participants may come from jurisdictions outside the DIFC. The laws of the DIFC have incorporated and recognise the Business Rules of an AMI. In certain instances, it is specifically provided that the Business Rules of Nasdaq Dubai take precedence over general insolvency laws. As a part of the approval process all participants are required to submit to the DIFC jurisdiction, which means that the DIFC law would prevail over the relevant laws of the jurisdiction from which a participant comes.

The DFSA AMI Rulebook set out the contractual framework and require Nasdaq Dubai to have clear and fair Rules which are legally enforceable against its Members, published and made freely available. The clarity, fairness and enforceability of Nasdaq Dubai's Rules have been considered and deemed appropriate by DFSA in the initial and continuing authorisation of Nasdaq Dubai as an Authorised Market Institution (AMI).

All Members enter into agreements as principal rather than agent, whether or not they are acting on behalf of a client. Nasdaq Dubai's Rules and other procedures cover all significant features of its operation as CCP and are enforceable against Members by virtue of the contractual relationship. Each Member irrevocably submits to the exclusive jurisdiction of the DIFC Court through their Membership agreement. The membership agreement would be recognised as a binding contract under the Contract Law, DIFC Law No 6 of 2004.

Nasdaq Dubai's legal framework is clearly articulated in its Rules and procedures which are published and readily available on its website and in the contractual agreements with its participants. The legal framework in the DIFC directly supports provisions related to finality of transactions. In addition, prior to a proposed change to the Rules, Nasdaq Dubai may conduct a public consultation which explains the reasons for the proposed changes and provides participants with the opportunity to comment.

Nasdaq Dubai relies on a combination of both internal and independent legal opinions to identify potential conflict-of-laws issues. In particular, Nasdaq Dubai has been provided opinions with respect to:

- The enforceability of the Nasdaq Dubai Business Rules
- The safeguarding and administration of assets
- The segregation and identification of assets.

Principle 2: Governance

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.

The objectives of Nasdaq Dubai are "to create a transparent, liquid and efficient exchange that will become the primary exchange for companies within the region wishing to access the international financial community and for international investors who need to access regional products and services."

Nasdaq Dubai has maintained exceptional system reliability having world class trading, clearing and settlement systems that ensures that market participants fulfil their post trade obligations in an efficient and timely manner, resulting in increased safety and efficiency of the markets.

The Board of Nasdaq Dubai monitors the performance of Nasdaq Dubai against the goals, objectives and targets stated in strategic plans, annual plans, and budgets, and may benchmark Nasdaq Dubai's performance against peer companies.

The Nasdaq Dubai Board is responsible and accountable to its shareholders, the Dubai Financial Market and Borse Dubai, for directing the company's affairs, for its system of corporate governance, its strategic objectives and for the stewardship of the company's resources.

The Board Committees assist the Board in overseeing the functions and performance of the management. There are currently three Committees that have been established: 1. Audit and Risk Management Committee 2. Market Oversight Committee 3. Nomination and Remuneration Committee Nasdaq Dubai's rules are publically available and are fair and transparent. They are applied equally to all and there is no discrimination against or preference given certain stakeholders. Having this robust infrastructure in place promotes financial stability and increases public confidence in its marketplace.
Principle 3: Framework for the comprehensive management of risks. An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.
Nasdaq Dubai's policies and procedures which help identify, measure, monitor and manage risk are derived from the DFSA AMI and GEN modules which contain risk management requirements for an Authorised Market Institution (AMI). The Board is responsible for determining the risk tolerance policy and it is the Audit and Risk Management Committee and the Risk Officer who establish policies, procedures which are consistent with Nasdaq Dubai's risk tolerance and appetite. The controls in place include audits (external and internal) as well as reviews of monthly quality report by the DFSA. Nasdaq Dubai established risk management systems and controls to enable it to identify, assess, mitigate, control and monitor its risks. The license for operating a market is not only in relation to establishing systems and controls, but also maintaining systems and controls. As per the Nasdaq Dubai Risk Management Framework dated November 2018, Nasdaq Dubai has identified the below as some of the risks it is exposed to: ▪ **Counterparty risk:** the risk relating to operating a clearing house and being the central counterparty to all trades cleared and settled on exchange. ▪ **Replacement risk:** the risk if a Member defaults, Nasdaq Dubai as the central counterparty will face replacement cost exposure. ▪ **Principal risk:** the risk that transactions are settled through delivery and delivery versus payment is not achieved. ▪ **Liquidity risk:** There are three main types of liquidity risk: o A counterparty will not make a payment or delivery in full when due, even though it ultimately meets that obligation for full value; o A counterparty will not be able to obtain sufficient funds to meet its obligations; o It is not possible to deal in a particular instrument or currency at a reasonable rate, i.e. market liquidity. ▪ **Credit Risk:** the risk of a Clearing Member, Custodian or Clearing/Settlement Bank not being able to fulfill their financial obligations. ▪ **Asset risk:** the risk relating to its asset management which includes the reinvestment of held margin funds. ▪ **Systemic risk:** the risk that the inability of one company to meet its obligations when due will cause other companies to fail to meet their obligations when due.

- **Operational risk:** the exposure created by deficiencies in business processes, internal controls or information systems that may result in an unexpected loss.
- **Reputational risk:** the risk of significant negative public opinion that results in a critical loss of business and customers.
- **Legal risk:** the risk arising from violations of, or non-conformance with laws, rules, regulations, or prescribed practices, or when the legal rights and obligations of parties to a transaction are not well established
- **Country risk:** the risk associated with the economic, social and political environments of the counterparties' home country**.**

The Nasdaq Dubai Audit and Risk Management Committee (ARMC) is responsible for reviewing and discussing Nasdaq Dubai's guidelines and policies governing the process by which senior management and the relevant departments of Nasdaq Dubai assess and manage Nasdaq Dubai's exposure to risk, as well as Nasdaq Dubai's major financial risk exposure and the steps management has taken to monitor and control such exposures. The ARMC periodically reviews management's assessment of operational risks in order to update the risk profile of Nasdaq Dubai and provide appropriate recommendations and updates to the Board. Any change or introduction of Risk management policies are presented to ARMC for approval.

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 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 exposures 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 exposures to the CCP in extreme but plausible market conditions.

Nasdaq Dubai in its capacity as a CCP is exposed to Credit risk from the possibility of a Clearing Member, Custodian or Clearing/Settlement Bank not being able to fulfill their financial obligations. Nasdaq Dubai acts as a CCP for both Equities and Derivatives markets. Nasdaq Dubai is required to establish and maintain risk management systems and controls to enable it to identify, assess, mitigate, control and monitor its risks.

Nasdaq Dubai incurs credit risk as a CCP from its settlement obligation that arises from novated transactions. As a CCP, novated transactions are required to be settled by the CCP even if Clearing Member fails to settle their obligations. This can incur large credit exposures on settlement days, when the full principal value of transactions may be at risk.

Nasdaq Dubai's framework for managing credit exposure is set by the Board in the risk tolerance policy. The policy sets out Nasdaq Dubai's risk mitigation approach to protect the Nasdaq Dubai Central Counterparty (CCP) and market participants from risk arising out of exceptionally large value transactions and large clearing obligations from market participants.

As new risks of Nasdaq Dubai activities are identified and assessed, the Board and senior management are kept informed of these changes. The framework is supported by robust Rules and procedures in place which Members are contractually bound to.

One of the key tools used to manage credit exposure is the requirement for margining and high quality collateral in the form of bank guarantees and/or cash. Another tool used is netting. Nasdaq Dubai requires that all open positions of an account can be netted on a continuous basis. This means that a position entered on an account, from a risk perspective is netted by any corresponding but opposite positions in the same security at the same account, and will be expressed as a single net position whenever possible, i.e. the Net Open Balance.

Nasdaq Dubai also maintains a Clearing Guarantee Fund which has been set at a certain amount deemed appropriate to the credit risks borne by Nasdaq Dubai. The adequacy of the CGF amount is monitored on an ongoing basis and necessary stress testing is conducted and reported to ARMC and DFSA.

Nasdaq Dubai also monitors the liquidity and credit obligations of Clearing Members on a regular basis. Members are also required to submit details on their liquidity and financial position on periodic basis, which is closely reviewed to ensure Members' capability to meet its financial obligations.

The Credit Risk Management framework is reviewed on an ongoing basis by monitoring the risk posed to the CCP by its participants. A detailed review is conducted at least on quarterly basis which includes stress testing of Nasdaq Dubai's credit risk profile and submitting a report to the ARMC with findings and recommendations for any updates to existing policies procedures and systems. When new securities or business lines are introduced to the market, a detailed review is conducted to ensure that risk imposed by new business lines are mitigated and managed through appropriate means. Any change or introduction of Risk management policies are presented to ARMC for approval. Any significant change in policy is also discussed and notified to DFSA as required by the AMI Rules.

Nasdaq Dubai is required to have systems and controls to enable it to determine and monitor whether its financial resources are sufficient to cover the CCP's current and potential future exposures. The adequacy of CGF is tested by conducting regular stress testing with key condition to cover probable default from the largest Clearing Members and 2nd largest Clearing Member defaults on same day under stress market conditions. Monitoring of CGF is conducted on daily basis and any deviations are reported to senior management. Results of stress testing are reported to Audit and Risk Management Committee Board committee (ARMC) and DFSA.

Principle 5: Collateral

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.

Nasdaq Dubai considers its volatility, liquidity and ability to value it fairly in determining whether a specific asset can be used as collateral. Currently all collateral is accepted in either cash in AED/USD/SAR or Bank Guarantees from banks that are unrelated to the participant and licensed by the UAE Central Bank. Limits are placed on banks to mitigate high concentration risk. In the case of Bank guarantees, a Member takes pre-approval from Nasdaq Dubai on providing guarantee from a specific bank. In providing such approval, Nasdaq Dubai determines if limits applicable to the Bank are reached and whether it poses any concentration risk to Nasdaq Dubai. Other eligibility factors are reviewed such as the banks rating, financial position, UAE Bank Central Bank license, etc.

Nasdaq Dubai monitors all collaterals placed on regular basis to ensure its quality has not deteriorated. This detailed review is done at least on a quarterly basis, with necessary alerts in place to highlight any change in credit quality of Banks on daily basis

Nasdaq Dubai currently does not accept any asset that needs valuation on daily basis as it does not accept securities like equities, bonds, etc. as collaterals. All obligations of Nasdaq Dubai and cash or bank guarantee collaterals accepted are in AED, USD or SAR. Since AED and SAR are pegged with USD, there is no need to do any valuation on daily basis or apply any haircuts as market value of collateral is always equal to or very near to required value of collateral.

The only cross-border collateral accepted is bank guarantees from banks regulated by the UAE Central Bank. There are no significant risks other than legal risk from accepting such collaterals. That risk is mitigated by requiring the issuing banks to submit to the exclusive jurisdiction of the DIFC Courts. The financial stability of these banks and ratings are regularly monitored to mitigate any risk from accepting Bank Guarantees from such banks. Any change in the UAE regulatory structure is monitored to ensure that the quality of collateral is maintained at an appropriate level.

The collateral management system is configured to ensure that most of the tasks like valuations, alert generation, making margin calls for shortages etc. are automated. In addition, the Clearing team is adequately staffed and trained to monitor the operational process and liaise with Members and banks during times of market stress and make any necessary changes in the automated process wherever required with proper authority.

Principle 6: Margin

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.

The general framework for Nasdaq Dubai's margin system is contained in the DFSA AMI module. The CCP margin model is risk based where Clearing Members are required to maintain margin requirements that is adequate to the risk they pose to the Clearing house.

The specific requirements that participants are required to comply with are stated in the Nasdaq Dubai Business Rules and supplemented by Notices/ Circulars and operating procedures. The Business Rules require Clearing Members to provide Margin in respect of their clearing and settlement obligations to Nasdaq Dubai. Currently Nasdaq Dubai accepts cash and bank guarantees as forms of eligible margin.

Nasdaq Dubai applies Initial margins and variation margins as risk management tool to mitigate its market risk:

- Initial margins: Initial margin methodology is designed to cover the performance by a Clearing Member's on its Net Open Positions. Initial Margin Rate is set to cover the losses with 99 % confidence level.
- Variation margins: Position is marked to market using variation margin approach. This reduces risk exposure to the CCP by preventing accumulation of losses for more than one day.
- Additional Margin: Nasdaq Dubai reserves the right to call for additional margin if it thinks it appropriate to do so to manage its risk under extreme market conditions.

For Equities, collaterals are required as pre-trading requirements and additional margin calls are made when such collaterals fall short of margin requirements. Sell trade orders are pre-validated against the availability of sufficient securities to clear the trades. These acts as additional risk mitigating factor where securities sold are blocked immediately for settlement on T+2 day. Initial Margins on net buy positions at appropriate levels are required to be maintained by Clearing Members at all times.

Margin methodology is documented in the operating procedures which are publically available on Nasdaq Dubai website. Details on internal process are documented in internal procedure documents and made available to relevant operational staff.

Nasdaq Dubai clearly indicates its timelines in its procedures and any failure of participants to meet these timelines is penalised through monetary penalties and/or suspension from trading.

By limiting collaterals accepted to only cash and third Party Bank Guarantees, the CCP minimises specific wrong-way risk. Additionally, the CCP also limits specific wrong-way risk towards banks issuing Bank Guarantees by:

a) Limiting bank guarantees to only those issued by Central Bank regulated entities,
b) Placing limits on the maximum amount of Guarantees a bank can issue based on its Tier 1 Capital,
c) Routinely assessing the credit rating of issuing banks and appropriately adjusting limits on maximum value of guarantees issued by each entity
d) Assessing overall exposure to individual banks on a monthly basis

Principle 7: Liquidity Risk

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.

The framework for managing liquidity risk is derived from the DFSA AMI module which contains detailed requirements for a Clearing House.

Nasdaq Dubai functions as a CCP for transactions executed in listed Equities held in its CSD as well as in cash settled Derivatives products. It's liquidity risk management framework consists of:

- Daily end of day margining; and if required intraday margining
- Collateralisation of obligation using only cash and cash equivalent Bank Guarantees. Lesser liquid assets such as securities are not accepted as eligible collaterals
- A Clearing Guarantee Fund (contributed by the exchanges shareholders)
- Effecting settlements through multiple banks to minimizer liquidity strains
- Intraday over draft facilities
- Overnight overdraft facilities
- An additional commitment from its shareholders to replenish the CGF if and when required

Nasdaq Dubai attempts to mitigate the risk of such participant default in the first place by admitting Clearing Members that have been screened for capital requirements. Nasdaq Dubai continuously monitors its liquidity requirement with availability of liquid assets.

As a general practice, Nasdaq Dubai tries to avoid having participants that perform different roles within its framework. Where this cannot be avoided for business reasons, exposure from such entity is aggregated, closely monitored and maintained at acceptable levels.

Liquidity requirements for Nasdaq Dubai primarily arise out of its obligation as a CCP for novated transactions executed on its exchange and this pertains to settling transactions executed in its Equities and Derivatives market. Nasdaq Dubai procedure states that variation margins will only be collected in cash, and this provides additional source of liquid resources to meet variation margin requirements.

Nasdaq Dubai uses a commercial bank of international reputation (Standard Chartered Bank) to hold its Clearing Guarantee Fund as well as obtain credit lines. Hence, the ARMC is reasonably comfortable that these liquidity avenues would remain accessible in the event of a local participant default.

As Nasdaq Dubai is a private limited company, the extent to which it is required to disclose information regarding its liquid resources is limited. Currently, the composition of Nasdaq Dubai's liquid resources includes:

- Cash collaterals and cash equivalent bank guarantees provided (defaulting Clearing Member's collateral can be utilised to cover the Member's obligation)
- Nasdaq Dubai minimum regulatory capital
- Intraday over draft facilities
- Overnight overdraft facilities
- Clearing Guarantee Fund (equal to USD 10 million as mentioned in the Business Rules)
- Nasdaq Dubai fixed deposits held in reserve to meet any unforeseen capital expenditure for new business opportunities

The manner and timeframe within which liquid resources can be liquidated is as follows:

- **Bank guarantees**: Issuing banks are required to unconditionally honour liquidation requests immediately upon receipt. Wording on accepted bank guarantees is carefully vetted by legal department before being accepted as valid collateral. Clauses on such guarantees have been drafted to ensure that Nasdaq Dubai has the unconditional right to demand liquidation.
- **Intraday and overnight overdraft facilities**: Intraday facilities are used and have been utilised successfully in a live environment. Terms and conditions for facilities are stated in contractual agreements with Clearing Bank to ensure facilities are available as and when required.

Principle 8: Settlement finality
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.

Nasdaq Dubai Business Rules, settlement shall be made by the transfer of Admitted Securities in satisfaction of each Clearing Member's Open Position for each Settlement Transaction for receipt by Nasdaq Dubai on the Settlement Date. Admitted Securities shall be transferred within the CSD. Cash shall be transferred between Nasdaq Dubai's settlement account at the Settlement Bank and Clearing Members' accounts at their Settlement Banks.

Nasdaq Dubai Business Rules, states that settlements are final when:

1. Cash is received at the Settlement Bank; or
2. In the case of Settlement Transactions, when Admitted Securities are credited or debited to an account at the CSD.

The Business Rules are governed by DIFC law and multiple legal opinions have been obtained to show that the rules are legally enforceable in relevant jurisdictions which demonstrates that there is a high degree of legal certainty that settlement finality will be achieved.

Settlement days and time are clearly stated in Nasdaq Dubai's Operating Procedures. There are relevant service level agreements with Settlement Banks and necessary IT systems in place to manage settlements on time. In addition to this, relevant trained staff closely monitors settlement of all obligations on times and any delay is immediately reported and addressed.

Necessary penalties are put in place for Members that fail to settle on time. Nasdaq Dubai maintains necessary overdraft facilities with its clearing bank to ensure any delay in settlement from participants do not impact entire settlements.

Principle 9: Money settlements

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 minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Nasdaq Dubai currently clears and settles only AED, USD and SAR denominated Equity and Derivative products. It conducts settlement using commercial bank money and utilises the following Settlement Banks:

- Emirates NBD Bank
- Standard Chartered Bank
- HSBC Bank Middle East Limited

Amongst these, Standard Chartered Bank functions as Nasdaq Dubai's main Settlement Bank for Equities with which the CCP maintains credit lines.

The criteria used by Nasdaq Dubai to select Settlement Banks and monitor them on an ongoing basis by themselves serve to help limit credit and liquidity risks arising from the use of commercial banks for settlement.

Nasdaq Dubai utilises different independent banks to effect settlements. This helps distribute concentration risk and the corresponding liquidity pressures away from individual banks. The actual concentration amongst Settlement Banks depends on how Clearing Member obligations develop on a daily basis, and therefore, the extent to which concentration can be controlled is practically limited to a certain degree.

Principle 10: Physical deliveries

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.

Nasdaq Dubai does not offer trading or clearing of financial instruments involving physical deliveries.

Principle 11: Central securities depositories

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

N/A to the scope of this review.

Principle 12: Exchange-of-value settlement systems 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.
Nasdaq Dubai does not settle transactions that involve the settlement of two linked obligations.
Principle 13: Participant-default rules and procedures 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.
The DFSA requires all Authorised Market Institutions to have Default Rules under Article 28 of the Markets Law and section 5.6.2 of the AMI module. Default Rules allow an Authorised Market Institution to close-out open positions by discharging the appropriate rights and liabilities of transactions which a Member or any other Person granted access to its facilities cannot, or may not be able to fulfil. Nasdaq Dubai's Business Rules clearly define the scenarios that may constitute an event of default. Nasdaq Dubai in its sole discretion can determine if an identified event constitutes a participant default. Nasdaq Dubai's Business Rules grant it the authority to declare defaults in the event that a participant fails to honor either buy and sell settlement obligations. However, resolution of a sell settlement failure is managed first through a fails management mechanism that is invoked automatically in the event of a securities shortage. Automatic invocation, however, does not imply an automatic declaration of participant default. Actions that would be initiated in the event of a settlement failure are outlined in Rule 6.4.6 of Nasdaq Dubai's Business rules. Additionally, in the event of a declared default, Nasdaq Dubai would notify regulators and the market (including non-defaulting members) of a participant default via an announcement (Rule 10.2). Nasdaq Dubai's rules and procedures aim to contain the impact of a participant default on normal market functioning. The CCP effects settlements by utilising liquidity reserves to honor the defaulting participant's obligations. Since non-defaulting members do not contribute to these liquidity reserves, their involvement in the event of a default is largely limited. Internal default management processes and remedial actions have been drafted in order to minimise the impact of a declared default on normal settlement activities. As stated in principle 7 (on Liquidity Risks), Nasdaq Dubai maintains sufficient liquid resources (as indicated by the current level of market activity) so that same day cash settlements can be effected in the event of a declared default
Principle 14: Segregation and portability 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.
Nasdaq Dubai Business Rules impose the requirement on participants to segregate its clearing and settlement arrangements for Admitted Financial Instruments into House Business, Customer Business and Market Maker activities. Nasdaq Dubai Business Rules require its participants to identify whether collaterals provided to the CCP pertain to Client or Proprietary business activity. Accordingly, collaterals are held on an omnibus level for Client activity. Except for the case of Direct Clearing Clients where separate positions, margin and asset accounts are created, Nasdaq Dubai CCP does not handle or manage collaterals belonging to participants' clients; Members are required to provide collaterals to honour both Client and Proprietary

margin obligations. The CCP in turn relies on its ability to obtain necessary records from Clearing Members (through enforcement of Business Rules) to ascertain client level segregation of collaterals, if required.

Segregation of participant customer positions (from House and Market Maker activity) begins from the moment an order / transaction is entered into Nasdaq Dubai's trading systems; proper identification and segregation of transactions in this manner is mandated in the order acceptance conditions.

Equity positions are largely held in Nasdaq Dubai's CSD on a beneficial owner level. As a CCP, Nasdaq Dubai relies on beneficial owner level information provided by the CSD to facilitate porting of Equity positions. Additionally, beneficial owners may directly request the CSD to move owned/settled positions to a new Clearing Member by directly submitting a valid request.

Since the CCP does not handle customer level collateral segregation, there are no formalised portability arrangements in regards to segregated client collaterals of a Defaulting Member. However, the CCP has the right to obtain records on client level segregation of collaterals from a Defaulting Member. These records can be used to facilitate porting of unused collaterals to a consenting Clearing Member.

Principle 15: General business risk
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 materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

In the Risk Management Framework, Business Risk is defined as the possibility a company will have lower than anticipated profits or experience a loss rather than taking a profit. Business risk is influenced by numerous factors such as competition, economic or political changes, staff turnover, partnering with or accepting members from new jurisdictions.

Nasdaq Dubai engages in an analytic process to define and identify the specific risks and sources of risks to which it is exposed. This involves getting together representatives from each department and identifying specific risks faced by each function. Following this discussion, the risks are classified with respect to the impact they can have on Nasdaq Dubai.

Nasdaq Dubai policies and procedures help identify, measure, monitor and manage risk are derived from the DFSA AMI and GEN modules which contain risk management requirements for an Authorised Market Institution. The Board is responsible for determining the risk tolerance policy and it is the Audit and Risk Management Committee and Head of Risk who establish policies, procedures which are consistent with Nasdaq Dubai's risk tolerance and capacity. The controls in place include audits (external and internal) as well as reviews of monthly risk management reports by the DFSA.

Nasdaq Dubai is also required to comply with the minimum financial resources requirement as prescribed by the DFSA. The minimum financial resources requirement is designed to ensure that Nasdaq Dubai not only has sufficient financial resources to meet its liabilities as they fall due, but also to allow, if circumstances require, for the orderly wind-down of its business, while still allowing it to meet the applicable requirements, including conditions on its license.

Principle 16: Custody and Investment risks
An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Nasdaq Dubai does not use custodians to hold its or its participants' assets. Since all of Nasdaq Dubai's assets are in commercial banks in the UAE it has prompt access to them. Funds are placed in current and call accounts that allow quick liquidation and have low risk. Details regarding return on funds placed with Nasdaq Dubai by market participants are contained in the Clearing and Settlement Procedures available on the Nasdaq Dubai website.

Principle 17: Operational Risk

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.

The Risk Management framework segregates operational risks as arising out of four sources; People, IT systems, Processes, and External Factors.

The framework then further identifies generic risk factors under each risk source. New operational processes are assessed to identify factors that could result in a process failure, which includes:

- New alternatives to existing processes;
- New processes aimed at handling new product lines/ services, as well as;
- Processes using new IT systems;

Operational processes are then augmented to address and mitigate the impact of specific risk factors on the exchange.

Nasdaq Dubai's Risk Management Framework focuses on ensuring that the exchange continues to be a stable, credible, and reliable organization that minimizes all potential risks to its stakeholders including market participants, investors, as well as the brand.

Risks arising out of systems, processes and external factors are identified at the outset and factored in when setting tolerance limits and drafting internal processes.

System and infrastructure related operational risks are primarily addressed and mitigated through inbuilt redundancies as well as data backup and replication mechanisms.

Process related operational risks are managed through a practice of internal reviews starting from the drafting phase. These processes are contained within Nasdaq Dubai's internal operating procedures that are owned by the respective functional teams.

Risks arising out of external factors such as participant defaults, settlement bank failures etc and how these have been addressed have been covered in earlier Principles. Additionally, in-house hosting and development of IT systems helps minimise over dependence on external entities for operational activities.

Nasdaq Dubai's systems, policies, processes and controls are derived from the requirements of the DIFC and DFSA regulatory framework, particularly the DFSA AMI and GEN modules. The DFSA requirements are benchmarked against international standards set by bodies such as IOSCO, FATF, ESMA etc. The DFSA actively monitors international regulatory developments to ensure that their Rules are in line with international industry standards. The systems, policies, processes and controls have been considered and deemed appropriate by DFSA in the initial and continuing authorisation of Nasdaq Dubai as an AMI.

The Board of Directors have delegated the responsibility for operational risk management to the Audit and Risk Management Committee (ARMC). One of the objectives of the ARMC is to periodically review management's assessment of operational risk.

Nasdaq Dubai provides information on its business continuity arrangements to its participants and also ensures its participants that pose significant risk to Nasdaq Dubai have robust business continuity arrangements in place. Nasdaq Dubai involves its key participants in any testing it conducts for continuity and takes feedback to keep improving the continuity plan. Similarly, it gets involved in its interdependent participant's business continuity arrangement.

Principle 18: Access and participation requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

Nasdaq Dubai's criteria and requirements for Membership are contained in the Business Rules and have been derived from the requirements of the DFSA AMI module. The requirements in the AMI module are benchmarked against international participation standards set by IOSCO and FATF.

Nasdaq Dubai restricts access to its trading facilities on the basis of criteria designed to protect the orderly functioning of its facilities and the interests of investors. Membership requirements described in the Business Rules ensure that only entities of high integrity become Members.

The admission criteria have been split to 5 specific areas against which applicants will be assessed. These areas are:

- Regulatory requirements
- Financial Adequacy
- Process and Procedures
- People
- Systems

The access criteria are clearly disclosed and publically available on Nasdaq Dubai's website. They are fair and transparent and applied equally to all participants as long they are able to satisfy the risk related participation requirements. At the time of this assessment, Nasdaq Dubai does not enter into any indirect participation arrangements. All participants have a direct contractual relationship with Nasdaq Dubai.

Nasdaq Dubai's participants on its facilities can be categorized into 3 categories below. In addition, Nasdaq Dubai has appointed settlement banks based in the UAE for clearing and settlement of cash obligations arising from transactions on Nasdaq Dubai.

- **Trading Member (TM)**: A TM simply executes trades which are cleared and settled by a General Clearing Member.
- **Individual Clearing Member (ICM)**: An ICM executes trades. It can also clear and settle its own trades.
- **General Clearing Member (GCM):** A GCM executes trades and can clear and settle them, as well as clear and settle the trades of Trading Members.

Nasdaq Dubai CCP also offers a direct clearing model to certain Derivatives clients. This is known as a Direct Clearing Customer (DCC) and is defined as a customer of a Derivatives Trading and Clearing Member, approved by Nasdaq Dubai to act as counterparty in respect of clearing proprietary derivative

transactions executed within a segregated clearing account opened in accordance with the Business Rules. The Minimum Capital Requirement imposed by Nasdaq Dubai varies based on Membership type. Additionally, Nasdaq Dubai periodically reviews the access restrictions and requirements through regular engagement with market participants by way of a formal as well as informal consultation process. Nasdaq Dubai also monitors current participant's ongoing compliance and risks to determine the adequacy of existing controls. As set out in the Nasdaq Dubai Business Rules, Members admitted are subject to a number of continuing obligations which are intended to ensure that the conduct of the Member on the Nasdaq Dubai market is of the highest standard.
Principle 19: Tiered participation arrangements An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.
Nasdaq Dubai does not enter into any tiered participation arrangements. All participants have direct contractual relationships with Nasdaq Dubai.
Principle 20: FMI Links An FMI that establishes a link with one or more FMI should identify, monitor, and manage link-related risks.
Nasdaq Dubai CCP currently does not have any links with external FMIs.
Principle 21: Efficiency and effectiveness An FMI Should be efficient and effective in meeting the requirement of its participants and the markets it serves.
Nasdaq Dubai's design (including clearing and settlement arrangement, operating structure, its delivery systems and technologies, and its individual services and products) has been approved and deemed appropriate by DFSA in the initial and continuing authorisation of Nasdaq Dubai as an AMI. Therefore, Nasdaq Dubai is assured that its design is aligned with and takes into account the needs of its participants and the markets it serves as well as the overall objectives of the DIFC. Nasdaq Dubai reviews the needs of its participants and other users through both formal and informal consultations through the use of round table discussions, user groups, market surveys and feedback from the relevant stakeholders to consider the views of participants when making key decisions such as changes to the settlement model or the introduction of new products. Nasdaq Dubai complies with the operational efficiency and resilience requirement of the DFSA AMI Module, which includes quantitative reliability objectives as well as quantitative reliability objectives. Qualitative reliability objectives are set on critical systems to ensure operational continuity. Systems are set to provide an uptime of 99%, and this is, achieved through the use of hardware redundancies, as well as data backup and real time replication. In the case of trading and clearing systems, for example, Nasdaq Dubai utilises a combination of auto failover systems as well real time data replication at the disaster recovery facility. Nasdaq Dubai is confident that goals and objectives mentioned above have been achieved due to the fact that:

• Systems and controls are compatible with operations and functions; • Compliance and risk management controls embedded in systems operate as intended; • It can continue to work effectively in stressed market conditions. Nasdaq Dubai uses a system of risk responses to help ensure operational reliability objectives are met. These risk responses are formalised on a policy level in the Risk Management Framework. The mechanism to evaluate efficiency and effectiveness varies from as frequent as daily checklists to less frequent but more detailed assessments in the form of review by independent auditors and system related tests as part of Nasdaq Dubai's Business Continuity Plan which are conducted periodically as and when required but at least once a year.
Principle 22: Communication procedures and standards 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.
Nasdaq Dubai is compliant with and has the ability to communicate using the SWIFT messaging network which is secure, standardised, reliable, and has international acceptance. • Communication between Nasdaq Dubai and its Clearing Bank is managed primarily through standard swift messages. • Information to Members and participants is communicated using SWIFT, or secure FTP as required by the participants. In addition to this, Members can use Nasdaq Dubai secured clearing systems to obtain details on settlement obligations, free collateral levels, inventory balances/position build up etc. on a real-time basis. Nasdaq Dubai does not conduct cross border payments, clearing or settlement of transactions. Marking up /down of securities between CSDs are the only types of cross-border transactions facilitated by Nasdaq Dubai. The process used for such transfers is outlined in the Operating Procedures for Members. For such transactions, the CSD utilises SWIFT protocols for communication. As a backup, in scenarios where the cross border links/participants involved are not SWIFT capable, the exchange uses purpose built forms in order to facilitate the transaction. Where any participant is not capable to communicate via SWIFT, Nasdaq Dubai provides information in a standard csv format that can be downloaded from secure FTP servers. The structure of these csv reports and the mode of their distribution are standardised and can be used by participants for straight through processing in order to minimise manual intervention and subsequent errors.
Principle 23: Disclosure of rules, key procedures, and market data 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.
Nasdaq Dubai's rules and procedures are contained in the following: • **Nasdaq Dubai Business Rules:** These rules contain the criteria governing the admission of Members and any other persons to whom access to its facilities is provided. They also contain clearing and settlement rules, as appropriate and default rules. • **Notices/Circulars:** These are communications issued by Nasdaq Dubai and are used to provide information and publish amendments of rules to participants.

- **Nasdaq Dubai Operating Procedures-Clearing and Risk Management for Derivatives:** This document provides the operations team at the Clearing Member a clear understanding of all the Derivatives post trades activities at Nasdaq Dubai. The document also provides information about the risk computation methodology and the clearing structure at Nasdaq Dubai.
- **Nasdaq Dubai Operating Procedures- Clearing, Settlement and Risk management for Securities:** This document provides the operations team at the clearing member a clear understanding of all the Securities post trades activities at Nasdaq Dubai. The document also intends to provide information about the risk management methodology and the clearing structure at Nasdaq Dubai.

All of these documents are publically available on Nasdaq Dubai's website.

The clarity, fairness and enforceability of Nasdaq Dubai's rules and procedures have been considered and deemed appropriate by DFSA in the initial and continuing authorisation of Nasdaq Dubai as an AMI. The AMI Module requires that the Business Rules of the AMI be legally binding and enforceable against Members and other participants.

The rights, obligations and risks incurred through participation on Nasdaq Dubai are published in the Business Rules. Continuing obligations are contained in detailed description of participant rights and obligations in various scenarios are contained in Chapter 6 (Clearing and Settlement) and Chapter 10 (Default Rules).

A comprehensive Nasdaq Dubai fee list for each individual service that Nasdaq Dubai offers, including potential rebates is publically disclosed on Nasdaq Dubai's website. The Business Rules state that Nasdaq Dubai shall provide reasonable advance notice to the Members of any changes to any such fees or charges or the imposition of any new fees and charges.

Nasdaq Dubai currently offers on its website real time market data to the public free of cost. This includes trading information as well as the full depth of the order-book. Additionally, the public can also obtain historical transaction volumes and values of securities traded on the exchange which is updated on a daily basis. On a monthly basis, Nasdaq Dubai issues trading reports which are publically available on the website and contain a summary and key highlights of trading data for the period.

As Nasdaq Dubai is a privately held company, the extent to which it is required to disclose its financial condition is limited. Also, it publishes an "Annual Review" which provides details of the year's trading performance as well as a review of key objectives and strategies of the exchange. The Annual Review also provides information about the exchanges Board of Directors and corporate governance framework.

Principle 24: Disclosure of market data by trade repositories

A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

Nasdaq Dubai is not licensed to operate as a trade repository.

V. List of publicly available resources

This section should list publicly available resources, including those referenced in the disclosure that may help a reader understand the FMI and its approach to observing each applicable principle.

1- Nasdaq Dubai Business Rules
   - Rulebook 1 for Equities
   - Rulebook 2 for Derivatives, Exchange Traded Commodities
   - Rulebook 3 for Admission and Disclosure Standards for Issuers
   - Rulebook 4 for Disciplinary Committee and Appeals Committee Procedures
     http://www.nasdaqdubai.com/exchange/regulatory-framework/business-rules

2- Nasdaq Dubai Notices, Circulars, and Disclosures
http://www.nasdaqdubai.com/exchange/regulatory-framework/notices
http://www.nasdaqdubai.com/exchange/regulatory-framework/circulars
http://www.nasdaqdubai.com/trading/disclosures

3- Market Data, Historical Price and Volume data
http://www.nasdaqdubai.com/marketdata
http://www.nasdaqdubai.com/trading/historical-prices

4- Trading Reports
http://www.nasdaqdubai.com/trading/trading-reports

5- Margin Parameters
http://www.nasdaqdubai.com/trading/margin-parameters

6- Nasdaq Dubai Fees; Overview for Fees for all Nasdaq Dubai Services and Products
http://www.nasdaqdubai.com/members/membership-fees

7- Qualified Central Counterparty Statement
http://www.nasdaqdubai.com/exchange/regulatory-framework/qccp

8- Clearing and Settlement Procedures
http://www.nasdaqdubai.com/members/procedures

9- List of Members, Market Makers, Custodians & Settlement Banks
http://www.nasdaqdubai.com/members/list-of-members

10- DFSA Rulebooks
http://dfsa.complinet.com/en/display/display.html?rbid=1547&record_id=1840