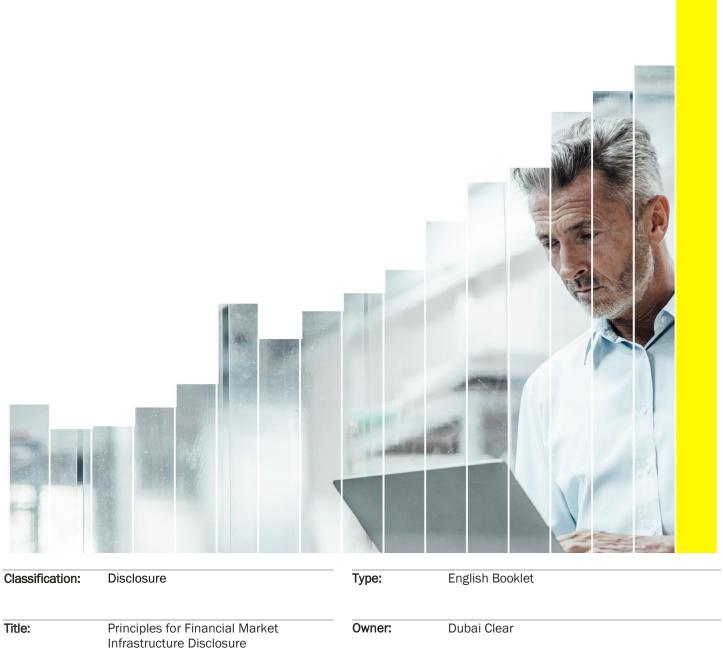
2023 **Principles for Financial Market** Infrastructure Disclosure

(As of 30 April 2023)



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I. EXECUTIVE SUMMARY

The Committee on Payments and Market Infrastructure* and the Technical Committee of the International Organisation of Securities Commissions (CPMI – IOSCO) have specified that financial market infrastructures (FMIs) to include central securities depositories (CSDs), securities settlement systems, central counterparties, payment systems and trade repositories which facilitate clearing, settling, and recording of monetary and other financial transactions.

In April 2012, CPMI-IOSCO issued a report called the Principles for Financial Market Infrastructures (FMI Principles) containing 24 principles. A key objective of the FMI Principles are to encourage clear disclosure of the principles by FMIs through a public "disclosure framework".

Dubai Clear LLC is incorporated under the UAE Commercial Company's Law No 2 of 2015 and registered for Central Counter Party Activity in UAE with Securities & Commodities Authority (SCA) under Decision No 22/R.M. of 2016 concerning the Regulation of the Central Counter Party (CCP) Business. This disclosure framework is intended to provide disclosures to Dubai Clear stakeholders in accordance with the FMI Principles.

*Prior to September 1, 2014, the Committee on Payments and Market Infrastructures was known as the Committee on Payment and Settlement Systems.



II. SUMMARY OF MAJOR CHANGES SINCE THE LAST UPDATE OF THE DISCLOSURE

This is the second disclosure of FMI Principles by Dubai Clear LLC (Dubai Clear) and has been updated for real-time risk calculation function for securities market settlement.

III. GENERAL BACKGROUND OF DUBAI CLEAR

Dubai Clear is incorporated under the Commercial Company's Law No 2 of 2015 of the United Arab Emirates (UAE) and is be regulated by Securities & Commodities Authority (SCA). In addition to the UAE Commercial Company's Law, Dubai Clear is also required to comply with the provisions of SCA's Decision No 22/R.M. of 2016 concerning the Regulation of the Central Counter Party (CCP) business and the guidelines issued by SCA from time to time.

Dubai Clear is a wholly owned subsidiary of Dubai Central Clearing and Depository Holding LLC (DCCD) which in turn is a wholly owned subsidiary of Dubai Financial Markets PJSC (DFM). DFM is a public joint stock company with a share capital of AED 8 billion operating a regulated exchange in the UAE.

Dubai Clear operates as a Central Counter Party for Cash and Derivatives markets. All trades are cleared by Dubai Clear through a process of novation. As a CCP, Dubai Clear acts as a buyer to every seller and seller to every buyer of each trade. The CCP eliminates settlement uncertainty for its market participants and minimizes the impact of default to its participants should a Clearing Member fail to fulfill its obligation.

The Dubai Clear Board of Directors and its various Board Committees oversee the affairs of Dubai Clear. There is an Executive Management team consisting of experienced professionals who oversee the affairs of Dubai Clear. The Executive Management is responsible for daily operations and functioning of the CCP along with formulation of strategies and policies which are approved by the Board of Directors.

Dubai Clear operates in the jurisdiction of the United Arab Emirates (UAE) and is governed by the UAE law and SCA regulatory framework. The SCA operates as the federal regulator and regulates the securities and commodities market. SCA is also an ordinary member of the International Organization of Securities Commissions (IOSCO) and chairs the Growth and Emerging Markets Committee of IOSCO.



Membership

Dubai Clear has the following categories of Members

1. Trading Clearing Members

Authorized to clear Proprietary and Client trades executed by the Member as a Trading Member of the DFM stock exchange.

2. General Clearing Members

Authorized to clear Proprietary and Client trades executed by the member as a Trading Member of the DFM stock exchange or trades executed by any other Non-Clearing Trading Members of the DFM stock exchange.

3. Settlement Agents

Authorized to settle Client trades on behalf of Clearing Members on a DVP basis directly with Dubai Clear.

While the above 3 categories of membership are allowed for the securities market (cash market) only Membership Categories 1 and 2 i.e. Trading Clearing Members and General Clearing Members are applicable for the clearing membership on DFM derivatives market.

Risk Management Framework

Dubai Clear has a robust risk management framework for managing risks, including clearing and counterparty risks, system risks and any other enterprise related risks. The Risk Committee (RC) of Dubai Clear approves all strategies and policies related to risk management which are finally endorsed by the Dubai Clear Board of Directors. The RC is supported by a dedicated Risk Management unit including an Enterprise Risk Management team, which reports to the RC through the Head of Risk Management.



IV. PRINCIPLE-BY-PRINCIPLE SUMMARY NARRATIVE DISCLOSURE

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.

Key consideration 1.1: The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.

Dubai Clear is incorporated under the UAE Commercial Company's law No 2 of 2015 and is be regulated by Securities & Commodities Authority (SCA). Dubai Clear operates under well-founded, legal framework which comprises of

- 1. Decision No 22/R.M. of 2016 concerning the Regulation of the Central Clearing Party (CCP) Business & Guidelines issued by SCA
- 2. Dubai Clear Rules (General Rules & Default Rules)
- 3. Policies and Procedures of Dubai Clear and
- 4. Agreements entered with stakeholders and business partners

These provide a high degree of certainty for each material aspect of the activities covered by Dubai Clear.

Key consideration 1.2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.

- 1. Dubai Clear has formulated its Rules, operational policies and procedures in accordance with the legal framework outlined above.
- 2. Dubai Rules are approved by the Dubai Clear Board of Directors (Dubai Clear BOD) and are also approved by SCA. The rules are reviewed periodically and updated in line with regulatory updates and services offered.
- 3. Dubai Clear has also issued operational policies and procedures to support application of its Rules. All policies are approved by the Dubai Clear BOD and its relevant committees and are published on the Dubai Clear website.
- 4. Dubai Clear enters into agreement with its Clearing Members, Settlement Agents, Settlement Banks, regulatory authorities and other stakeholders in accordance with the Dubai Clear Rules.
- 5. The Rules have been reviewed independently by an external law firm Clifford Chance to determine enforceability.
- 6. Market participants are also governed by an agreement signed with Dubai Clear.



Key consideration 1.3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and understandable way.

Based on legal framework outlined above, Dubai Clear is able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant participants' customers, in a clear and understandable way. The legal framework and various regulations governing the CCP Activities of Dubai Clear is available in public domain and on the Dubai Clear website. Dubai Clear relies on the relevant provisions of the SCA Regulations, if required, to support the legal basis for its activities.

Key consideration 1.4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.

The UAE has well founded legal system which provides high degree of certainty that the action taken by Dubai Clear under its rules, procedures and agreements are enforceable. These are guided by relevant regulations issued by SCA governing the activities undertaken by the Dubai Clear pursuant to the relevant regulations. The UAE also has a Netting Law and is an ISDA netting jurisdiction. This allows Dubai Clear to legally net trades for settlement.

Key consideration **1.5**: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.

Not applicable - Dubai Clear does not operate in multiple jurisdictions.



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 SCA Regulations Decision No 22/R.M. of 2016 concerning the Regulation of the Central Counter Party clearly together with the relevant guidelines issued by SCA prescribe key governance arrangements relating to Dubai Clear and also the prescribed mandatory positions and committees.

Functioning of the CCP

The SCA regulations defines the functions of the CCP – "Assume the role of the counterparty for all trading transactions carried out in the market to ensure the settlement. Determine the net rights and liabilities of the Clearing Members for all trades concluded in the market and determine their legal statuses which arise from the trading transactions".

Shareholders

The SCA Regulations provides that SCA must approve the founders and holders of the controlling shares in addition to be fully informed of their identity, equity percentage. Any changes in founders and holders of the controlling shares is also required to be approved by SCA.

Board of Directors & Management

The SCA regulations requires that the Authority must be notified upon the appointment of the Chairman, members of the Board of Directors, the Chief Executive Officer or their deputies as well as their remuneration system, provided they meet the competence and fitness requirements in accordance with the controls issued by the Authority. At least one-third of the Board of Directors' membership shall be subject to a minimum of two Board members must be independent members and should have adequate experience in the area of financial services, risk management, clearing and settlement services

Dubai Clear Governance

Dubai Clear has governance arrangements that are clear and transparent, promote the safety and efficiency of the Dubai Clear, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders. In addition to the Board of Directors, Dubai Clear also has the Audit Committee, the Remuneration Committee and the Risk Committee.

Key consideration 2.1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.

Dubai Clear operates under well-established UAE and SCA legal framework that places high priority on the safety and efficiency of Dubai Clear and explicitly support financial stability and other relevant



public interest considerations. The primary function of Dubai Clear is to act as Central Counter Party for each trades executed on the market and thereby reduce the Settlement and Default risk for its participants. The functions of the CCP are also clearly defined in the SCA CCP regulations.

Key consideration 2.2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.

Dubai Clear has documented governance arrangements that provide clear and direct lines of responsibility and accountability. These are defined in the CCP rules and the SCA regulations pertaining to CCP. The SCA regulations clearly define the obligation of the Board of Directors and that of the Executive Management. The Dubai Clear rules and the SCA regulations are published on the Dubai Clear website. Dubai Clear also has a well-defined organization structure which clearly indicates the reporting line and the responsibilities. These are also published in the Dubai Clear website and made available to the public.

Key consideration 2.3: The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.

SCA regulations No 22/R.M. of 2016 concerning the Regulation of the Central Counter Party clearly defines the role of the Board of Directors and that of the Executive Management.

The minimum obligation of the Board of Directors under Article 10 of SCA regulations are defined as

- 1. Determine the objectives and strategies of the CCP.
- 2. Management of the company, Setting the goals for the technical and administrative staff, especially in relation to honesty and competence, and supporting the financial stability and matters related to public interest.
- 3. Effective control of the senior and executive managements.
- 4. Oversee the risk management, compliance and internal control functions.
- 5. Set salary policies.
- 6. Oversee the procedures of outsourcing and compliance with all the applicable legislations.
- 7. Form a risk committee comprising of the members of the Board and Executive Management of the CCP and the Clearing Members.
- 8. Ensure disclosure of the conflict of interests and manage them accordingly.

Obligations of the Executive Management under Article 11 of SCA regulations are defined as

- 1. Ensure that the activities of the CCP are consistent with its objectives and strategies in the manner set by the Board of Directors.
- 2. Design and develop procedures for compliance and internal control which boost the objectives of the company.



- 3. Subject the internal control procedures to regular review and examination.
- 4. Make sure that adequate resources are allocated for the risk management and compliance functions.
- 5. Participate in controlling the risks arising from the business practice to ensure that they are effectively addressed and mitigated

The Board and Executive Management Roles and Responsibilities are well defined under the Dubai Clear corporate governance framework. The Executive has well established procedure for its functioning in accordance with global standards and also have supporting committees to support them perform their duties. The Board reviews the performance of members and committees periodically. All employees of the Dubai Clear are governed by the employee code of the conduct policy which manages various aspects related to conflict of interest.

Key consideration 2.4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non- executive board member(s).

SCA regulations clearly mandates that at least one-third of the Board of Directors' subject to a minimum of two Board members who must be independent members and whom have adequate experience in the area of financial services, risk management, clearing and settlement services. Dubai Clear Board of Directors comprise of Seven Board Members with the majority of them as Independent Board Members. All the Board Members are highly experienced professional and have all the relevant experience to perform their duties to efficiently manage the CCP.

In addition to the Board of Directors, there are three specialized Board committees mandated by SCA including Risk Committee, Audit Committee, Nomination and Remuneration committee. These committees are chaired by independent Board Members and comprise of members who have the relevant specialization and skills.

Key consideration 2.5: The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.

The roles and responsibilities of the Executive Management are clearly defined in the SCA Regulations. Dubai Clear Management committee has the appropriate experience, mix of skills, and the integrity necessary to discharge their responsibilities. Executive Management are required to be fit and proper person and follow employee code of conduct as prescribed by Dubai Clear. In addition to the Executive management, SCA also mandates certain critical Mandatory position which include Operations Manager, Risk Officer, Compliance officer. These positions are required to be filled by specialized professional having relevant experience and are also required to clear professional Examination specified by SCA for each of this position. Dubai Clear has a dedicated Risk Officer, Compliance officer



& Operations Manager who have the required experience and skill to ensure efficient discharge of their duties.

Key consideration 2.6: The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.

Dubai Clear has a comprehensive Risk Management Framework approved by the Risk Committee and Board of Directors in compliance with guidelines issued by SCA. Dubai Clear has constituted an Independent Risk Management Committee comprising of members from the Board in accordance with SCA guidelines.

Article 3-8 of the SCA Decision No 22/R.M. of 2016 concerning the Regulation of the Central Counter Party Business requires a provision of risk management operational guide that enumerates and defines potential risk and the method by which risks will be addressed, monitored, and reported so that the CCP can continue its business and comply with the SCA provision. Article 5-9 requires SCA to be provided with a list of members of the risk committee and the objectives and conditions of the committee, as well as the duties and responsibilities of its members. Dubai Clear Risk committee has a well-defined term of reference which clearly specifies objective of the Risk Committee along with their Roles and Responsibilities.

Risk management

The Risk Management unit performs various functions to manage clearing and enterprise risks, including:

- 1. Identifying, measuring, monitoring, and managing clearing risks and taking appropriate risk mitigating actions, where necessary.
- 2. Develop comprehensive risk policies and frameworks to manage credit, liquid, and market risks
- 3. Developing Margin Policy for the CCP for all products cleared by the CCP.
- 4. Perform Stress test and Back Testing to independently assess the Risk management models capabilities.
- 5. Overseeing development and implementation of the Default Management Framework for all products cleared by Dubai Clear.
- 6. Developing a comprehensive Enterprise Risk Management Policy to support the effective management of risk at the Organization level.

The Risk Management function is an independent function and reports to the Risk Manager, who in turn reports to the Chief Executive Officer with a parallel reporting to the Risk Committee. The Risk Manager attends all the Risk Committee meeting and reports relevant matters to the committee



Internal audit

The Internal Audit function provides an independent evaluation of the effectiveness Dubai Clear risk management, operations and governance function. This is carried out by an independent department who reports to the head of Internal Audit who in turn reports to the Audit Committee which is a Board committee. The Internal Audit team creates a comprehensive detailed audit plan based on the risk matrix and the same is approved by the Audit committee and the Board at the beginning of each year. All audit findings are presented to the Audit committee and reviewed periodically.

Key consideration 2.7: The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

The Legal & Regulatory framework and governance arrangements ensure that design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its participants and other relevant stakeholders. All major decisions related to relevant stakeholders are communicated by way of consultation papers and decisions informed via Circulars which are also made available in the Dubai Clear website.



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.

Key consideration 3.1 An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.

Dubai Clear has a Risk Management Framework in line with the SCA guidelines that comprehensively address the applicable risks. Article 3-8 of the SCA Decision No 22/R.M. of 2016 concerning the Regulation of the Central Counter Party Business requires a provision of risk management operational guide that enumerates and defines potential risk and the method by which risks will be addressed, monitored, and reported so that the CCP can continue its business and comply with the SCA provision. The Dubai Clear Risk management framework has adopted the risk management principles and guidelines from COSO ERM integrated framework, ISO 31000 and the KPMG ERM model. The Risk Management framework is reviewed annually, and any changes are presented to the Risk Committee for their review and approval.

The Risk framework is broadly classified under

- 1. Enterprise Level Risk
- 2. Business Continuity Level Risk
- 3. Clearing & Settlement Level Risk

Dubai Clear manages and maintains a Comprehensive Risk Register which list down all relevant risk pertaining to Dubai Clear. These risks are classified based on severity and likelihood and mapped against the respective control elements in place to arrive at a residual risk. The Risk register is reviewed on a quarterly basis to identify any potential new risk or update any existing risk. Any update to the risk registers is reported in the quarterly Risk Committee meetings.

Key consideration 3.2: An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.

Dubai Clear prescribes rules and procedures to participants to support them to identify their risk and to enable them to manage and contain the risk to Dubai Clear.

In addition to the rules and procedures, Dubai Clear also provide its participants with relevant information in the form of reports and data feeds in a timely manner to facilitate to manage their risk.

- 1. Trading Clearing Members, Clearing Members and Settlement Agents receive real-time feed of matched trades from the Market.
- 2. Trading & Clearing Members are provided with a Clearing Workstation which provides with real



time information in relation to their trades. In case of Clearing Members, they have access to trade information for all Trading Members clearing through them.

- 3. In addition to trade information, the Clearing system provide real time information in relation to position, funds settlement and Securities Settlement.
- 4. Clearing Workstation also provides Members with reports covering the latest margin requirements, Margin Utilization, Collateral balance and also sends predefined alerts to their registered email ids.

Risks created by not complying with rules and procedures are managed by a penalty structure imposed on Dubai Clear participants.

Key consideration 3.3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk- management tools to address these risks.

The Risk Management Framework of Dubai Clear addresses material risks it bears from and poses to other entities (such as other FMIs and service providers) as a result of interdependencies and develops appropriate risk- management tools to address these risks. This review is documented in the Risk Register of the Dubai Clear

Key consideration 3.4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

Dubai Clear has a Disaster Recovery plan and Business Continuity Management framework at a group level along with DFM PJSC to address scenarios that may potentially prevent it from being able to provide its critical operations and services. The Disaster Recovery Policy and Business Continuity Management policy is built in line with international standards for business continuity: ISO 22301: 2012. The Disaster Recovery plan and Business Continuity Management framework are tested regularly to test its effectiveness. In case of orderly wind-down, the regulator's advice will be followed and implemented.



Article 24 of SCA Decision No 22/R.M. of 2016 concerning the Regulation of the Central Clearing Party Business provides for specific provision with regards liquidation and Bankruptcy of the CCP.

- 1. A CCP shall be liquidated in accordance with the laws applicable in the State.
- 2. In the event of voluntarily or mandatory liquidation of a CCP, liquidation shall be performed under the supervision and control of the Authority.
- 3. In the event a judgment is issued declaring the bankruptcy of a Clearing Member, the CCP shall cease its business arising from the transactions to which the CCP is a party before the judgment is issued. Such transactions shall be deemed valid towards everyone and the CCP shall process the guarantees to ensure that such member meets its due obligations or the obligations arising from the decisions made by the Authority or the market prior to the issuance of the judgment even if such procedures extend until after the issuance of the judgment. This shall be done in coordination between the Authority and the liquidator.
- 4. The Authority shall have the right to appoint an entity to assume the duties of the CCP in accordance with the conditions and requirements deemed appropriate at its own discretion.



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 but plausible market conditions.

Key consideration 4.1: An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

Dubai Clear has a robust Risk Management framework and uses a variety of controls to manage these risks.

Clearing Members

- 1. Dubai Clear has developed a Membership policy under which only financially sound Members, licensed by the SCA that meet the minimum Collateral Requirements as prescribed by Dubai Clear (Refer Membership Policy) are admitted as Clearing Members. This ensures that Clearing Members have the strong financial capabilities are admitted to be Members of Dubai Clear.
- 2. Clearing Members are required to meet the minimum collaterals requirements on an on-going basis.
- 3. The Clearing System also monitors the Members margin requirements on a real time basis and Members have to ensure that they comply with margin adequacy to allow them to trade.
- 4. In addition to Initial Margins, Members are also required to cover variation margins at the end of each day through their collaterals based on the closing price of each security cleared by the member to address the actual price movement during the day
- 5. The Dubai Clear Rules empowers Dubai Clear to request for additional margins in case the CCP through its assessment believes that the Members Collaterals and or liquidity resources are not commensurate with the level of business, operations or financial conditions.
- 6. All settlements on Dubai Clear are settled on a delivery-versus-payment (DVP) basis wherein Securities and cash settlement are effected immediately.

Settlement Banks

Dubai Clear performs its funds settlement only through the approved Settlements banks within the UAE which are commercial banks licensed by the Central Bank of the UAE. All Clearing Members are required



to open a Settlement Account with one of the Settlement Banks. Dubai Clear currently has two approved settlement Banks of which one is one of the largest local bank in the UAE and the other is one of the top international bank licensed in the UAE.

Key consideration 4.2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.

Dubai Clear is exposed to credit risk exposure (both current and potential future) from its Clearing Members based on the outstanding positions held by these Members and movement in price of the securities relevant to the outstanding position. In order to control these risk, Dubai Clear calculates Initial Margins on a real time basis and variation margins on an end of day basis. These margins are blocked against the member's collaterals which in turn limits its ability to take over additional positions. Both these margins are calculated at an end client level and grossed up to form the member level margins. In case of variation margin, Dubai Clear does not allow of offset of margin benefits across clients i.e. Variation Margin profit from one client is not allowed to be offset against the Variation Margin loss of another client. In case of breach of any margin limits Clearing Members are immediately restricted from taking over any new positions.

In addition to margins Dubai Clear has also setup a Settlement default fund in line with SCA regulations and international standards. Dubai Clear also performs stress testing under extreme but plausible historical and hypothetical scenarios to determine the adequacy of Settlement default fund.

Key consideration 4.3: A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

Dubai Clear performs is settlement on a DVP basis where securities and money settlement are effected simultaneously and accordingly is not exposed to this risk. Dubai Clear does not operate a DNS payment system. Settlement of any negative Variation Margins for derivatives settlement are conducted by debiting collateral of Clearing Members

Key consideration 4.4: A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). 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 to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other



CCPs 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 participant and its affiliates that would 26 CPSS-IOSCO – Disclosure framework and assessment methodology – December 2012 potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.

Dubai Clear calculates margins on all outstanding trades/ Open Positions held by its Clearing Members on a real time basis. Margins are calculated using statistical methods using Value at Risk model with a 99% confidence interval and a one-day look ahead period. SCA has also clearly defined the margin methodology to be followed by the CCP. Members are required to deposit Collaterals with the CCP against which these margins are blocked. Dubai Clear accepts only high quality collaterals which are also provided for in the SCA Regulations.

In addition to Margins, Dubai Clear also maintains a Settlement default fund (SDF) to cover the CCP in case of a default from any of its Clearing Member. The size of the Settlement default fund is sufficient to cover the default of its Largest Clearing Member or the sum total of the default of the Second and Third Largest Clearing Members. The Settlement default fund is created with the contribution from the CCP (skin in the game) and from the contribution from the Members. The SCA CCP regulations have provided for specific provision for setting up of the Settlement default fund under which the CCP is required to contribute a minimum of 25% of its paid up capital. The balance is contributed by the Members based on the risk they pose to the CCP.

Key consideration 4.5: A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform CPSS-IOSCO – Disclosure framework and assessment methodology – December 2012 27 this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.

The SCA CCP regulations requires a CCP, to setting up of the Settlement default fund to be utilized in the event of a Default. In line with the SCA requirements Dubai Clear has setup a Settlement Default Fund (SDF) sufficient enough to cover the default of its Largest Clearing Member or the sum total of the default of the Second and Third Largest Clearing Members. The SDF is created with the contribution from the CCP (skin in the game) and from the contribution from the Members. The SDF is stress tested on a daily



basis to ensure its adequacy using historical and hypothetical scenarios. Dubai Clear uses a series of historical scenario including extreme volatile scenarios in addition to hypothetical scenarios. These stress test results are presented and reviewed by the Dubai Clear Risk Committee in their quarterly meeting. There are separate SDFs for securities and derivatives settlements.

Key consideration 4.6: In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.

Dubai Clear performs stress testing on a daily basis to ensure the adequacy of its Settlement default fund. As part of it stress testing procedure, it uses a variety of historical and hypothetical scenarios to ensure maximum coverage. Dubai Clear uses a series of historical scenario including extreme volatile scenarios in addition to hypothetical scenarios. For each of these scenarios Dubai Clear identifies the possibility of default of the largest Clearing Member and that of the sum of the second and third largest Clearing Member. The default fund is then compared with these default scenarios to ensure it is adequate to cover such extreme by plausible scenario.

Key consideration 4.7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner

Dubai Clear has a segregated section in its Rule Book for Default Rules. These Rules clearly provide for procedure to be followed in case of default including the procedure for the application of the default waterfall. Once the default waterfall is applied in case of the default or the default fund is not adequate to cover the loss, there are specific provision for replenishment of the default fund which are clearly provided in the Default Rules.



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.

Key consideration 5.1: An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.

Dubai Clear only accepts quality collateral with low credit, liquidity and market risks. SCA regulation under Article 15 has provided that the CCP shall collect the margins and guarantees from the Clearing Members in the form of cash, securities or bank guarantees, subject to meeting the following conditions:

- 1. Securities:
 - a) Securities must be highly liquidity and low risk in terms of market, credit, and concentration risks.
 - b) Securities must be subject to discount rates (Hair Cut) to reflect the market and credit risks as per the controls set by the CCP.
 - c) The CCP shall not be entitled to re-mortgage such securities.
- 2. Cash guarantee:
 - a. It shall be maintained with a licensed bank characterized by the distribution of risks therein
 - b. or they are invested in high-quality instruments of the cash market while avoiding the wrong way risks when investing the cash guarantees.
- 3. Bank guarantee:
 - a. A bank guarantee is required to be issued in favour of the CCP It must be unconditional, irrevocable and non-negotiable

In line with the SCA regulations, Dubai Clear accepts collaterals only in form of cash, securities or bank guarantees. These are published in the Dubai Clear website under the collateral management policy. Dubai Clear maintains a conservative approach towards the wrong-way risk of the collateral that it accepts. Specific wrong-way risk arising from Collaterals posted by Clearing Members is prevented by prohibiting the acceptance of related collateral from the Members.

Key consideration 5.2: An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.

Dubai Clear follows a conservative approach in applying haircuts to the collaterals accepted. All Cash collaterals are held in current accounts with the Settlement Banks and can be called at any point in time and hence no haircut is levied. For Bank guarantees, they are unconditional bank guarantees issued by



local UAE banks licensed by UAE central bank and can be liquidated immediately based on demand, accordingly no haircut is applied for Bank Guarantees. In case of Securities accepted as collaterals, Dubai Clear applies a conservative haircut of 50% and these are re-valued on a daily basis.

Key consideration 5.3: In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.

Majority of the collaterals accepted by Dubai Clear are in the form of Cash and Bank Guarantee. Both these forms are collaterals are unconditional and available at the disposal of Dubai Clear to be called upon at any point in time. In case of Securities accepted as collaterals, Dubai Clear applies a conservative haircut of 50% and these are re-valued on a daily basis. These haircut rates established by Dubai Clear are very conservative and are derived taking to consideration extreme price movements observed during periods of stressed market conditions. This conservative approach allows the CCP to avoid the need of procyclical adjustments since these are already taken into consideration while determining the haircut.

Key consideration 5.4: An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.

Collaterals received from Members are well spread out across different financial institutions. Dubai Clear has adequate procedures in place to monitor collaterals accepted from its members and ensures that there is no concentration risk.

Key consideration 5.5: An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.

As at current date Dubai Clear does not accept cross-border collaterals.

Key consideration 5.6: An FMI should use a collateral management system that is well designed and operationally flexible.

All collaterals posted by Members are posted and recorded in the Dubai Clear Clearing system. This system is well designed to ensure collaterals are recorded correctly. The Clearing system has a member interface which allows Clearing Members to generate a Collateral report at any point in time which can be easily downloaded by the Members. The Clearing system has a complete audit trail and can monitor the movement of Collaterals effectively.



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.

Key consideration 6.1: A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.

Dubai Clear levies Initial Margin and Variation Margins on trades cleared by the Clearing Members. Initial Margin rates are calculated using statistical methods using Value at Risk model with a 99% confidence interval and a look ahead period of 1 day. Margins are determined for each security using historical prices of the respective security for last 6 months or 3 years whichever is higher. While calculating the margin rate, Dubai Clear also considers the liquidity of the security and charges a minimum floor rate for illiquid securities.

Initial Margin and Variation Margin are calculated on a real-time basis and deducted from collaterals posted by the Member. In addition to real-time margin calculations, Initial margins and Variation Margin are recalculated at the end of each day based on the closing price of each security. Variation Margins are blocked against the member's collaterals along with Initial Margins. Both these margins limit the member's ability to take over additional positions. These margins are calculated at an end client level and grossed up to form the member level margins. In case of variation margin, Dubai Clear does not allow of offset of margin benefits across clients i.e. Variation Margin profit from one client is not allowed to be offset against the Variation Margin loss of another client. In case of breach of margin limits, Clearing Members are immediately restricted from taking over any new positions. Dubai Clear also has provision to call for additional margins in case of extreme market volatility

Key consideration 6.2: A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.

As at current date, Dubai Clear only clears securities and derivatives traded on Dubai Financial Markets. Therefore, Dubai Clear has access to price information on a real time basis. The margin for each security is calculated based of closing price, which is reliable and timely.

Key consideration 6.3: A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a)



use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.

As of date Dubai Clear clears securities and derivatives traded on Dubai Financial Markets which are settled on a T+2 settlement cycle for securities and T+1 for negative VM for derivatives.

Securities:

Initial Margin

Initial Margin rates are calculated using statistical methods using Value at Risk model with a 99% confidence interval and a look ahead period of 1 day to cover the day's risk till variation margin is calculated and blocked. Initial Margin rates are calculated for each security using historical prices of the respective security for last 6 months or 3 years whichever is higher. Dubai Clear also considers the liquidity to the security to determine the margin rate. All securities which do not qualify under the liquidity criteria are levied a minimum floor rate of 10%. Initial margins are calculated at each end client level and then grossed up to arrive at member level margins. Dubai Clear does not provide offset of margin across securities while calculating Initial Margin requirements.

Variation Margin

Dubai Clear calculates variation margin at the end of each day based of closing price of the security. Variation Margins are also calculated at client level and Dubai clear does not allow offset of variation margin benefit across clients i.e. Variation Margin profit from client under a member is not offset against Variation Margin loss from another client under the same member.

Derivatives:

Initial Margin(IM)

Initial Margin is broadly divided into Base Margin (BM) + any Spread Margin (SM). A Base Margin(BM) will be calculated on Net Open Positions for the futures contract for each underlying at client level while SM will be calculated on any Spread position across futures contract for each underlying at client level. BM will be applied to the net open position across futures contract in a particular underlying based on the margin rate per contract at each client level. SM will be applied only when client positions receive the spread positions benefit for the futures contract at each underlying. All client level IM will be aggregated to become the Member's daily margin requirement to be deducted against collateral at end of the day.

Variation Margins(VM)

All outstanding positions will be Marked-to-Market(MTM) once a day at the end of the day based on the Close Price. Settlement of profit and loss from VM will be on the next settlement day by 09:30 UAE



time wherein in case of profits the DCM's funds settlement account will be credited and in case of losses, the DCM's funds settlement account will be debited. All Derivatives Clearing Members must ensure sufficient unencumbered funds in their funds settlement account with ENBD Bank. Failure to ensure settlement of daily VM losses will result in sanctions and charges by Dubai Clear. In addition, the Derivative Clearing Members and its Trading Members will be suspended from taking on new positions.

Key consideration 6.4: A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.

In addition to real-time calculations of IM and VM for securities market, at the end of each day Dubai Clear calculates Variation margin for each member based on the close price for each security. Variation margin is calculated at a client level and Dubai Clear does not allow offset of Variation Margin across Clients i.e. Variation Margin profit from client under a member is not offset against Variation Margin loss from another client under the same member. Variation margin calculated is blocked against the Clearing Member's collaterals which in turn limits his ability to take over new position. Variation margins for securities are only released once the trades are settled by the CCP. Dubai Clear also has provision to call for additional margins in case of extreme market volatility.

Key consideration 6.5: In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-management systems.

As at current date Dubai Clear does not allow margin offset across products and across CCPs.

Key consideration 6.6: A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily backtesting – and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.

Dubai Clear performs back-testing of its margin models on a daily basis to ensure that the models are performing effectively. The results of these back testing is presented to the Risk Committee on a quarterly basis and in case of any deviation, the models are adjusted accordingly taking into consideration the market condition and volatility.



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.

Key consideration 7.1: An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.

Dubai Clear through its Finance and Risk Management team has an established Risk Management framework for managing liquidity risk arising from its clearing and settlement. Dubai Clear ensures that it maintains adequate liquid reserves with the settlement banks to ensure settlement of its obligation on a timely basis. Dubai Clear has two approved settlement banks which has a standard operating procedures that allows Dubai Clear to move funds among the settlement bank without delays to ensure timely settlement to Clearing Members. In addition to this, Dubai Clear also has committed credit lines and investments in highly liquid assets with the settlement banks to support completion of settlement in case of any special need.

Key consideration 7.2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

Daily fund settlement with the settlement banks are performed on an automated basis without manual intervention. For each instruction sent to the settlement bank, Dubai Clear receives a confirmation status from the Settlement bank. The Finance team of Dubai Clear has access to the banking portal which enables it to view the status of fund balances on a near real time basis including the status of its Settlement obligation. The intraday credit line for liquidity is also reviewed on a periodic basis to ensure adequacy in line with settlement values.

Key consideration 7.3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or 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 payment obligation in extreme but plausible market conditions.

Dubai Clear ensures that it maintains adequate liquid reserves with the settlement banks to ensure settlement of its obligation on a timely basis. Dubai Clear has two approved settlement banks which has a standard operating procedures that allows Dubai Clear to move funds among the settlement



bank without delays to ensure timely settlement to Clearing Members. In addition to this, Dubai Clear also has committed credit lines and investments in highly liquid assets with the settlement banks to support completion of settlement in case of any special need.

Key consideration 7.4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time 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 payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the consider maintain additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

Dubai Clear performs settlement only in UAE Dirhams. Based on the historical settlement obligations and market conditions, Dubai Clear ensures that it maintains adequate liquid reserves in UAE Dirhams and also has a committed line of credit to ensure settlement of its obligation on a timely basis. Dubai Clear does not operate in multiple jurisdictions and thereby is not subject to multi-jurisdictional risk involving settlements. Also, since Dubai Clear conducts settlement only in UAE Dirhams, it is not exposed to FX risk involved when multiple settlement currencies are involved.

Key consideration 7.5: For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such resources should be available when needed.

Dubai Clear does not have access to credit at the Central Bank. Dubai Clear performs settlement only in UAE Dirhams and ensures that it maintains adequate liquid reserves and credit lines to ensure settlement of its obligation on a timely basis. In addition to the committed line of credit Dubai Clear also have highly liquid investments with other commercial banks in the UAE which can be called upon request to support settlement if required.

Key consideration 7.6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot reliably prearranged or guaranteed in extreme market



conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.

Dubai Clear also has committed credit lines and investments in highly liquid assets to support completion of settlement.

Key consideration 7.7: An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

Dubai Clear also has committed credit lines and investments in highly liquid assets to support completion of settlement. These are reviewed periodically based on settlement analysis and market conditions. Dubai Clear has undertaken diligent review while selecting the settlement banks. Dubai Clear has 2 approved settlement banks which are of high quality in terms of Liquidity risk. One of settlement bank is a local commercial bank and one of the largest bank in the UAE. The second settlement bank is one of top international bank, licensed to operate in the UAE.

Key consideration 7.8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.

Dubai Clear is in discussion with UAE Central Bank for funds settlement in central bank money, however the same is in progress and not yet implemented

Key consideration 7.9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period.



In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

Dubai Clear's Finance and Operations team work jointly to determine the liquidity requirements for Dubai Clear to ensure meeting its settlement obligation. These are based on historical scenarios and futuristic scenario based on market conditions.

Key consideration 7.10: An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

Dubai Clear has appropriate rules and procedures in place in relation to settlement. Dubai Clear rules also have specific rules in relation to default management including provision as to how settlement will be completed in the event of default. These rules are publically available and also published on the Dubai Clear website.



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.

Key consideration 8.1: An FMI's rules and procedures should clearly define the point at which settlement is final.

Dubai Clear Rules and procedures provide for provisions in relation to Settlement finality which are affected through and govern all instructions, transfers, deliveries, realizations and/ or disposals. The Dubai Clear rules clearly define under the relevant section specially related to settlement and delivery as to when the settlement is considered as final and the obligation of the party is considered to be discharged.

Key consideration 8.2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.

All trades cleared by Dubai Clear are mapped with the Settlement Day. Settlement Day is defined as a Business Day on which the parties to a Contract are to perform their obligations to settle cash and/or Securities thereunder as set out by the Clearing House in the Procedures. Dubai Clear ensures that all settlement is completed on the Settlement Day. All trade settlement including securities settlement and funds settlements are effected and considered final upon completion of the settlement run.

Key consideration 8.3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.

The Dubai Clear rules clearly defines under the relevant sections specially related to settlement and delivery as to when the settlement, payment or transfer instruction is considered as final and cannot be not be revoked by a participant.



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.

Key consideration 9.1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

Dubai Clear performs its settlement in UAE Dirhams through settlement banks who are licensed commercial bank by Central Bank of UAE. As at current date, Dubai Clear does not perform settlement in Central Bank money but is in discussions for doing so.

Key consideration 9.2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk

Dubai Clear performs its settlement in UAE Dirhams only and there is no FX conversion risk associated with settlement. Dubai Clear has two approved settlement banks which are of high quality in terms of Liquidity risk. One of settlement bank is a local commercial bank and one of the largest bank in the UAE. The second settlement bank is one of top international bank, licensed to operate in the UAE.

Key consideration 9.3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.

Dubai Clear has two approved settlement banks which are of high quality in terms of Liquidity risk. One of settlement bank is a local commercial bank and one of the largest bank in the UAE. The second settlement bank is one of top international bank, licensed to operate in the UAE. Dubai Clear on a half yearly basis performs reviews on its settlement bank including review of its creditworthiness, ratings, services and any material negative information surrounding these banks.

Key consideration **9.4***:* If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.

Dubai Clear does not conduct money settlements on its own books

Key consideration 9.5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum



by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.

Dubai Clear has signed agreements with its Settlement Banks which clearly enumerates the obligation of the settlement bank and the time when these obligations are required to be performed. For each instruction sent by Dubai Clear, the Settlement is required to perform the transaction and provide a confirmation message back to Dubai Clear based on the agreed SLA which is defined as part of the Settlement bank agreement. Any transactions performed by the Settlement banks based on the instructions of Dubai Clear are considered final and cannot be revoked by the Bank.



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.

Key consideration 10.1: An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.

Dubai Clear does not handle any physical deliveries. Dubai Clear performs settlement of securities by sending instructions to the Depository (Dubai CSD) who in turn performs this obligation by book entry in the depository systems. All securities in the depository are held in dematerialized form without any physical certificate

Key consideration 10.2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.

This recommendation is not applicable since Dubai Clear currently does not handle any physical deliveries.

PRINCIPLE 11: CENTRAL SECURITIES DEPOSITORIES

Not Applicable to Dubai Clear

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.

Key consideration 12.1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

Dubai Clear performs its settlement on a BIS Delivery versus Payment (DVP) Model 2 basis wherein funds and securities are settled simultaneously. Dubai Clear initiates the settlement of securities only once it receives confirmation from the Settlement bank that the funds have been received, accordingly the funds are released to the seller only on the confirmation that the securities have been received from the Settlement, money settlement is conducted on a net basis and securities settlement is conducted on a gross basis.



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.

Key consideration 13.1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.

Dubai Clear has issued specific rules for managing default of its Clearing Members under Part 2-Default Rules of its Clearing Rules. These rules clearly define and addresses key aspects of the participant's default especially

- 1. What constitutes an Event of Default
- 2. Default Management actions to be performed in the Event of Default
- 3. Powers of the Clearing House in the Event of Default.
- 4. Provisions in relation to the setting up of the Settlement Default Fund including contribution by Members and replenishment of contribution following a default
- 5. Provisions in relation to Client porting
- 6. Application of Settlement Default Fund resources.

These rules are approved by SCA and also available on the Dubai Clear website.

Key consideration 13.2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

Dubai Clear Default Management rules and procedures provide guidance in handling and managing a default event. When an event of default occurs, Dubai Clear in accordance with its default management procedures, will:

- 1. Declare the event of default
- 2. Provide notification to Non Defaulting Members and Settlement Agents
- 3. Initiate the Default Management process.

Dubai Clear is well prepared to implement its default rules and procedures through periodic default event drills.



Key consideration 13.3: An FMI should publicly disclose key aspects of its default rules and procedures.

Dubai Clear has issued specific rules for managing default of its Clearing Members under Part 2 of its Clearing Rules. These rules are publicly available on the Dubai Clear website www.dubaiclear.ae.

Key consideration 13.4: An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.

Dubai Clear default procedures are well established and demonstrated in the practice. Dubai Clear had conducted a market consultation while drafting the initial clearing rules including the default rules and as a practice engages Members while implementing any critical changes to CCP rules.



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

Key consideration 14.1: A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.

All trades cleared at Dubai Clear are recorded at client level. Dubai Clear calculates margins at client level and does not allow offset of margins across clients. Due to this segregated account structure, Dubai Clear can easily identify the positions and the associated margins and obligation at client level which support porting of position and associated margins in case of a default. Dubai Clear rules provides for a provision for a client to register a backup Clearing Member to allow porting of positions and associated margins/collaterals in case of a default of the original Clearing Member. These are provided under Rule 7 of the Default rules issued by Dubai Clear. The SCA regulation under Article 7 also requires CCP have appropriate procedures in place when there is a separation of accounts of the Clearing Members to facilitate the transfer of financial positions and guarantees from a defaulting member to a complying member. In case the financial positions and guarantees are kept in a form of combined accounts, the CCP shall spare no effort to assist the transfer of the said positions and guarantees.

Key consideration 14.2: A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.

All trades cleared at Dubai Clear are recorded at client level. Dubai Clear calculates margins at an client level and does not allow offset of margins across clients. Dubai Clear is easily able to clearly identify the positions and the associated margins and obligation at Client level which support porting of position and associated margins in case of a default.



Key consideration 14.3: A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.

Since all positions in Dubai Clear are maintained at Client level and margins are calculated at client level without client level offset, it facilitates Dubai Clear to offer Client Porting. Dubai Clear has also created the relevant regulatory framework through its specific rules and procedure in relation to client porting along with SCA regulation to support porting of positions from a defaulting Clearing Member to another member.

Key consideration 14.4: A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.

Dubai Clear has provided for specific rules in relation to Porting of Client under Rule 7 of its Default Rules. These rules provide for

- 1. General provision in relation to Porting
- 2. Provisions related to agreement for Porting
- 3. Initiation and Procedure for Porting
- 4. Rights and obligation under Ported Client Contracts
- 5. Provision related to Ported Collaterals
- 6. Cost and expenses in relation to Porting

These rules have been approved by SCA and is published on the Dubai Clear website thereby making it available to public. In addition to Dubai Clear rules, SCA regulation under article 7 that the CCP have appropriate procedures in place when there is a separation of accounts of the Clearing Members to facilitate the transfer of financial positions and guarantees from a defaulting member to a complying member. In case the financial positions and guarantees are kept in a form of combined accounts, the CCP shall spare no effort to assist the transfer of the said positions and guarantees.



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.

Key consideration 15.1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or unexpected and excessively large operating expenses.

Dubai Clear Board, various Board Committees and Management committee oversee the business and affairs of Dubai Clear. Dubai Clear has a dedicated risk management framework that enables oversight and management of risks with defined responsibilities and accountabilities. Key risks including general business risks, strategic risk, regulatory risk, technology risk etc. identified under the Enterprise Risk Management (ERM) Framework are monitored and managed by the relevant teams. These are reviewed on a periodic basis and reported to the Audit Committee, Risk Management Committee (RMC) and the Board

Dubai Clear management in conjunction with the Finance team prepare business plans annually which are reviewed and approved by the Board. In addition, Dubai Clear has a regulatory obligation to report financials to its regulator. As per Article 16 of the SCA Decision No 22/R.M. of 2016 concerning the Regulation of the Central Clearing Party Business, Dubai Clear is required to submit to SCA its Quarterly Financial report reviewed by its external auditor within a period of no longer than 30 days from the end of the quarter. Article 16 of the SCA regulations provides that an annual financial report audited by the company external auditor must be submitted to SCA within 90 days after the end of the fiscal year.

Key consideration 15.2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

Dubai Clear holds adequate liquid net assets funded by equity (AED50 million as paid-up capital as mandated by SCA) so that it can continue operations and services as a going concern if it incurs general business losses.

Key consideration 15.3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks



covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

SCA has clearly defined the capital requirement for the CCP under its CCP regulations and credit facilities. Dubai Clear holds sufficient net assets funded by equity of AED50 million in line with SCA requirements. These are adequate to implement the above requirement and will also support the viable recovery and orderly wind down in case required.

Key consideration 15.4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.

Dubai Clear has an initial paid-up capital of AED50 million comprising cash at bank to meet its current and projected operating expenses. These funds are invested in high quality and sufficiently liquid assets in accordance with Dubai Clear investment policy.

Key consideration 15.5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.

Article 3 of SCA Decision No 22/R.M. of 2016 concerning the Regulation of the Central Clearing Party Business provides that the paid up capital of the CCP should not be less than 50 Million UAE Dhirams. A prior SCA approval is required before any increase or decrease of its capital. The provision related to the capital also form part of the Memorandum of Association of Dubai Clear.



PRINCIPLE 16: CUSTODY AND INVESTMENT RISK

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.

Key consideration 16.1: An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.

Dubai Clear safeguards its own and its Clearing Member's assets through approved and licensed financial institutes. All settlement related funds are held only with the approved settlement banks which are licensed commercial banks by the Central Bank of UAE.

Key consideration 16.2: An FMI should have prompt access to its assets and the assets provided by participants, when required.

Dubai Clear has prompt access to its assets and the assets provided by participants since these are held with approved and licensed financial institutions

Key consideration **16.3***: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.*

Dubai Clear through its Finance team have clear policies to address counterparty credit and concentration risks from banks and custodians. These are reviewed periodically and approved by the group investment committee and the Board.

Key consideration 16.4: An FMI's investment strategy should be consistent with its overall riskmanagement strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

Dubai Clear has well formulated investment policy as part of group company policy which lays down the guidelines to invest the surplus funds available with Dubai Clear on account of normal business operations, internal accruals or maturity of existing investments. The permissible Investments along with the maximum investment limits as prescribed in the investment policy ensure that the investment strategy is consistent with overall risk-management strategy.



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.

Key consideration 17.1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

Dubai Clear has a comprehensive Risk Management Framework and internal controls to monitor and manage the operational risks. Dubai Clear maintains a detailed risk register across the organization to list the risk associated with all its operations along with the impact and controls in place to mitigate these risk. In addition to the risk register, it has standard operating procedures and process flows to manage such risks. These are reviewed on a periodic basis to ensure the effectiveness of the control and reported to the risk committee on a quarterly basis.

Key consideration 17.2: An FMI's BoD should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk- management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.

The Risk Management framework is endorsed by the Board of Directors and also by the Risk Management Committee. The Risk Management Committee of Dubai Clear reviews the Risk Management Framework on a periodic basis for addressing the operational risks. In addition to the risk framework, Dubai Clear has a group level Internal control team which performs audits on Operations and its process to ensure adequate controls are in place to manage operational risk.

Annually, the Internal Audit function prepares and executes a risk-based audit work plan to assess the adequacy and effectiveness of internal controls. This workplan includes the evaluation of operational, financial, compliance and information technology controls. Any findings are then reported to the Board Audit committee along with the corrective action which are then reviewed on a quarterly basis. In addition to Internal Audit Dubai Clear is also subject to external audit and government audit who will highlight any weaknesses observed in the operational processes.



Key consideration 17.3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.

Dubai Clear has operational reliability objectives in place including availability objectives and business continuity plans. Dubai Clear maintains a detailed register for each of its operational process. These operations are then categorized based on its criticality and market impact. Against each of these operations Recovery Time Objective and Recovery Point objective is defined to ensure minimum disruption. These are reviewed periodically and enhanced to achieve high availability time and minimum to no loss of data. As a business practice these plans are reviewed on periodic basis to test its effectiveness.

Key consideration 17.4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

Dubai Clear system capacity is tested to handle stress volumes and is designed to handle higher volumes. Periodic system upgrades are performed to ensure that the systems are capable of handling stressed volumes including future growth of volumes.

Key consideration **17.5***: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.*

Dubai Clear has systems and processes in place for addressing physical and information security. Information Security Policies are based on the following ISO 27001:2013 standards information security principles:

- 1. Confidentiality: protecting sensitive information, including intellectual copyright, from unauthorized disclosure or intelligible interception;
- 2. Integrity: safeguarding the accuracy and completeness of information and computer software;
- 3. Availability: ensuring that information and vital services are available to authorized users when required.

Information security is also covered under annual Information Technology audits.



Key consideration 17.6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.

Dubai Clear has a Business Continuity Management policy to facilitate uninterrupted business operations. Business continuity procedures and the restart capabilities are periodically tested to ensure smooth operations in case of a disruption. Dubai Clear has a disaster recovery site designed to ensure resumption of critical IT systems in less than two hours. The switchover from the normal system to DRS is tested periodically. In addition, Dubai Clear has the capability to operate 100% remotely as demonstrated during the covid lockdown period.

Key consideration 17.7: An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.

Dubai Clear has prescribed the operating procedures and controls to be complied by the Members. Dubai Clear has adequate procedures in place to identify, monitor, and manage the risks that its operations might pose to other FMIs.



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.

Key consideration 18.1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.

Participation requirements are laid down in SCA Regulations and in Dubai Clear Rules and Operational policies. Dubai Clear provides fair and open access to its services based on risk related participation requirements. Dubai Clear membership criteria are approved by SCA and are publically available. Dubai Clear admits the following category of Members

1. Trading Clearing Member (TCM)

Authorized to clear proprietary and client trades executed by the member as a Trading Member of the DFM.

2. General Clearing Member (GCM)

Authorized to clear proprietary and client trades executed by member as a Trading Member of DFM or trades executed by any other Non-Clearing Trading Member of DFM.

3. Settlement Agent (SA)

Authorized to settle Delivery Versus Payment (DVP) trades on behalf of Clearing Members.

Dubai Clear has clearly defined provisions related to its membership under Chapter 2 of its General Clearing rules. On a broader level, these relate to

- 1. Licensing requirement by SCA or similar regulator approved by SCA
- 2. Minimum financial requirement
- 3. Minimum Collateral & default fund contribution requirement
- 4. Minimum operational & technical capabilities
- 5. Fit and proper status of its directors and officers

These criteria are reviewed on an ongoing basis to ensure compliance.



Key consideration 18.2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.

The participation requirements are laid down in SCA Regulations and in Dubai Clear Rules and Operational policies. These are laid down to ensure safety and efficiency of Dubai Clear in performance of its role as a licensed CCP. Dubai Clear Rules and membership policy are publicly available on the Dubai Clear website and are accessible to all participants.

Key consideration 18.3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements

The Dubai Clear Rules, operational policies and the circulars issued from time to time prescribe monitoring mechanisms on an ongoing basis and also lay down procedures for facilitating the orderly exit of a participant that breaches or no longer meets the participation requirements. Dubai Clear General rule has specific provision on suspension, termination and resignation of membership and the procedures to be followed in each of these cases. Dubai Clear Rules are publicly available on the Dubai Clear website and are accessible to all participants.



PRINCIPLE 19 TIERED PARTICIPATION ARRANGEMENTS

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

Key consideration 19.1: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.

Clearing Members and Settlement Agents are direct members of Dubai Clear and have access to its clearing service. Dubai Clear admits the following category of members

1. Trading Clearing Member (TCM)

Authorized to clear proprietary and client trades executed by the member as a Trading Member of the DFM.

2. General Clearing Member (GCM)

Authorized to clear proprietary and client trades executed by member as a Trading Member of DFM or trades executed by any other Non-Clearing Trading Member of DFM.

3. Settlement Agent (SA)

Authorized to settle Delivery Versus Payment (DVP) trades on behalf of Clearing Members.

Indirect members would be Trading Members, Trading Member Clients and Clients of the Clearing Member /Settlement Agent. Dubai Clear rules require Clearing Member & Settlement agents to maintain records of its client including complete details of their transactions. Under the SCA regulations and the Clearing rules, the regulator and the CCP have complete authority to ask from the members any information in relation to clients and the members are under an obligation to provide such information within the time prescribed by the CCP or SCA.

Key consideration 19.2. An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.

Dubai Clear performs regular monitoring of its Members to identify the counterparty risk faced by the CCP. In addition to monitoring Members, Dubai Clear also monitors Client level positons to identify client positions that may pose potential risk to the CCP. In addition to counter party risk, Dubai Clear also monitors the operational capabilities of its Members to ensure that they can perform their obligation towards the CCP and its clients on an ongoing basis.



Key consideration 19.3. An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.

Dubai Clear performs regular monitoring of its Members to identify the counterparty risk it contributes to the CCP. Dubai Clear deals only with the Clearing Members who are responsible for fulfilling the financial obligation towards the CCP on behalf of their clients. All Clearing Members are required to post adequate collaterals with the CCP and are not allowed to take positions beyond their collateral limits. In addition to this all positions are maintained at the CCP on end client level basis. The Clearing system for Dubai Clear calculates margins on a real-time baisis and at an client level and the system also capable of providing margin and position reports at Client level. This supports the CCP to identify Clients who hold huge positions and monitor their activity if required.

Key consideration 19.4. An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.

Dubai Clear has in place a well-established framework, policies and procedures for addressing risks from tiered participation. The Clearing system is capable of providing detailed information which allows Dubai Clear to carry out the required analysis on the risk and put in place necessary controls and measures in place to deal with these risks.



PRINCIPLE 20: FMI LINKS

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

Key consideration 20.1: Before entering into a link arrangement and on an ongoing basis once the link is established, an FMI should identify, monitor, and manage all potential sources of risk arising from the link arrangement. Link arrangements should be designed such that each FMI is able to observe the other principles in this report.

Dubai Clear does not have links with other CCP's

Key consideration 20.2: A link should have a well-founded legal basis, in all relevant jurisdictions, that supports its design and provides adequate protection to the FMIs involved in the link.

Not applicable

Key consideration 20.3: Linked CSDs should measure, monitor, and manage the credit and liquidity risks arising from each other. Any credit extensions between CSDs should be covered fully with highquality collateral and be subject to limits.

Not applicable

Key consideration 20.4: Provisional transfers of securities between linked CSDs should be prohibited or, at a minimum, the retransfer of provisionally transferred securities should be prohibited prior to the transfer becoming final.

Not applicable

Key consideration 20.5: An investor CSD should only establish a link with an issuer CSD if the arrangement provides a high level of protection for the rights of the investor CSD's participants.

Not applicable

Key consideration 20.6: An investor CSD that uses an intermediary to operate a link with an issuer CSD should measure, monitor, and manage the additional risks (including custody, credit, legal, and operational risks) arising from the use of the intermediary.

Not applicable



Key consideration 20.7: Before entering into a link with another CCP, a CCP should identify and manage the potential spill-over effects from the default of the linked CCP. If a link has three or more CCPs, each CCP should identify, assess, and manage the risks of the collective link arrangement.

Not applicable

Key consideration 20.8: Each CCP in a CCP link arrangement should be able to cover, at least on a daily basis, its current and potential future exposures to the linked CCP and its participants, if any, fully with a high degree of confidence without reducing the CCP's ability to fulfill its obligations to its own participants at any time.

Not applicable

Key consideration 20.9: A TR should carefully assess the additional operational risks related to its links to ensure the scalability and reliability of IT and related resources.

Not applicable



PRINCIPLE 21: EFFICIENCY AND EFFECTIVENESS

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves

Key consideration 21.1: An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

Dubai Clear's services are designed to cater the requirements of various participants and to build investor confidence by providing settlement guarantee and reducing counter party risk. The Clearing framework takes into consideration local market conditions to support the financial market framework in the region especially with the introduction of DVP trades involving Settlement Agents to cater to international investors.

Dubai Clear uses advanced technology to support market participants in performing their obligation which includes real time risk management, access to trade and position information on a real time basis and in an easily downloadable format. Dubai Clear uses a hybrid risk management model to cater to retail investors as well as international institutional investor trade settlements.

Dubai Clear constantly engages in market feedback to review the quality of its services and also identify areas of development. It also ensures to undertake market consultation for new products as well as before any implementation of significant changes in the operating model or clearing rules. The introduction of a CCP was to increased efficiency in utilization of collateral from a 100% pre-funding model to one of margins.

Key consideration 21.2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk- management expectations, and business priorities.

Dubai Clears corporate goal and objective aims to provide investors with a trusted clearing house service. It aims to provide a safe, secure and efficient clearing and settlement service while meeting the operational, risk, capital and regulatory requirement mandated by SCA. Dubai Clear has well defined business objectives and the business performance is reviewed periodically by the Executive Management and reported to the Board of Directors.

Key consideration 21.3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.

Dubai Clear has well defined business objectives through setting up of Key Performance Indicators (KPI) and the business performance is reviewed periodically by the Executive Management and reported to the Board of Directors. Dubai Clear also conducts periodic meetings with its stakeholder and conducts surveys to obtain feedback on the quality of services offered by the CCP.



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.

Key consideration 22.1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.

Dubai Clearing systems currently use internationally accepted messaging format for processing of electronic information. Dubai Clear provides a Clearing interface to its member to allow Members to perform their post trade activities and view and download post trade related information. Dubai Clear CDP uses Secured File Transfer Protocol (SFTP) as the secure mode of exchanging files/reports with Members and stakeholders like settlement banks. These files contain information related to clearing and settlement and payment information at which allows the stakeholders to integrate them directly with their back office operations.



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.

Key consideration 23.1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.

Dubai Clear has laid down comprehensive Rules and operational policies which are fully disclosed to the participants. The key policies and procedures in form of circulars are issued from time to time to the participants. Dubai Clear rules, policies and procedures are publicly available and published on its website at www.dubaiclear.ae.

Key consideration 23.2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.

The rights and obligations are disclosed in the Dubai Clear Rules and Operational policies. The circulars issued by Dubai Clear and the agreements required to be executed are also disclosed to the participants which enables them to assess the risks they would incur by participating in the FMI. All participants are provided during the critical system designs which supports them to align their systems and operations to perform their obligations.

Key consideration 23.3: An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.

Training is provided to the Members about the clearing operations and systems which facilitates the Members' understanding of the Dubai Clear Rules and Operational policies, procedure and the risks that the participant may face. Dubai Clear has periodic meetings with the Members to identify issues and communicate futures plans including new process and procedures.

Key consideration 23.4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.

Fees and Charges for various services offered by Dubai Clear to the stakeholders are publicly disclosed. Any change in pricing is notified to SCA for approval and also to the Members by way of circulars.



Key consideration 23.5: An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.

The PFMI Disclosures are available on a request basis. Work is in progress for basic data to be published through CCP Global of which Dubai Clear is a full member.

PRINCIPLE 24 : DISCLOSURE OF MARKET DATA BY TRADE REPOSITORIES

Not Applicable to Dubai Clear



ABBREVIATIONS AND DEFINITIONS

BOARD	THE BOARD OF DIRECTORS OF DUBAI CLEAR
CCP	CENTRAL COUNTERPARTY
CIRCULARS	BINDING NOTICES ISSUED BY DUBAI CLEAR REGARDING REGULATORY AND NON-REGULATORY MATTERS PERTAINING TO CLEARING MEMBERS.
CLEARING MEMBER	AN ENTITY ADMITTED AS A MEMBER OF DUBAI CLEAR PURSUANT TO THE CLEARING RULES. INCLUDES A GENERAL CLEARING MEMBER, A TRADING CLEARING MEMBER
CSD	CENTRAL SECURITIES DEPOSITORY
TRADING CLEARING MEMBER	AS ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED AS A TRADING MEMBER OF THE DFM STOCK EXCHANGE.
DCCD	DCCD DUBAI CENTRAL CLEARING AND DEPOSITORY HOLDING LLC
DFM	DUBAI FINANCIAL MARKETS PJSC
DVP	DELIVERY VERSUS PAYMENT
FMI	FINANCIAL MARKET INFRASTRUCTURE
FMI GENERAL CLEARING MEMBER	FINANCIAL MARKET INFRASTRUCTURE AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED BY ANY OTHER NON-CLEARING TRADING MEMBER OF DFM.
GENERAL CLEARING	AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED
GENERAL CLEARING MEMBER	AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED BY ANY OTHER NON-CLEARING TRADING MEMBER OF DFM.
GENERAL CLEARING MEMBER IOSCO	AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED BY ANY OTHER NON-CLEARING TRADING MEMBER OF DFM. INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURE DATED APRIL 2012 ISSUED BY THE COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS AND
GENERAL CLEARING MEMBER IOSCO PFMI	AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED BY ANY OTHER NON-CLEARING TRADING MEMBER OF DFM. INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURE DATED APRIL 2012 ISSUED BY THE COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS AND THE TECHNICAL COMMITTEE OF IOSCO. AN ENTITY AUTHORIZED TO SETTLE CLIENT TRADES ON BEHALF OF
GENERAL CLEARING MEMBER IOSCO PFMI SETTLEMENT AGENTS	AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED BY ANY OTHER NON-CLEARING TRADING MEMBER OF DFM. INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURE DATED APRIL 2012 ISSUED BY THE COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS AND THE TECHNICAL COMMITTEE OF IOSCO. AN ENTITY AUTHORIZED TO SETTLE CLIENT TRADES ON BEHALF OF CLEARING MEMBERS ON A DVP BASIS DIRECTLY WITH DUBAI CLEAR SECURITIES & COMMODITIES AUTHORITY A BANK APPOINTED BY DUBAI CLEAR (DC) TO CARRY OUT PAYMENTS BETWEEN DC AND CLEARING MEMBERS IN ACCORDANCE WITH THE DUBAI CLEAR CLEARING RULES.
GENERAL CLEARING MEMBER IOSCO PFMI SETTLEMENT AGENTS SCA	AN ENTITY AUTHORIZED TO CLEAR PROPRIETARY AND CLIENT TRADES EXECUTED BY HIM AS A TRADING MEMBER OF DFM OR TRADES EXECUTED BY ANY OTHER NON-CLEARING TRADING MEMBER OF DFM. INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURE DATED APRIL 2012 ISSUED BY THE COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS AND THE TECHNICAL COMMITTEE OF IOSCO. AN ENTITY AUTHORIZED TO SETTLE CLIENT TRADES ON BEHALF OF CLEARING MEMBERS ON A DVP BASIS DIRECTLY WITH DUBAI CLEAR SECURITIES & COMMODITIES AUTHORITY A BANK APPOINTED BY DUBAI CLEAR (DC) TO CARRY OUT PAYMENTS BETWEEN DC AND CLEARING MEMBERS IN ACCORDANCE WITH THE DUBAI



LIST OF PUBLICLY AVAILABLE RESOURCES

DUBAI CLEAR POLICIES	AVAILABLE ON DUBAI CLEAR WEBSITE <u>HTTPS://WWW.DUBAICLEAR.AE/DUBAI-CLEAR/REGULATIONS-</u> POLICIES-PROCEDURES
DUBAI CLEAR'S GENERAL RULES FOR CLEARING SERVICES	AVAILABLE ON DUBAI CLEAR WEBSITE <u>HTTPS://WWW.DUBAICLEAR.AE/DOCS/DEFAULT-SOURCE/DUBAI-</u> <u>CLEAR/DUBAI-CLEARCCP-RULEBOOKGENERAL-</u> <u>RULES.PDF?SFVRSN=92F12581_0</u>
DUBAI CLEAR MEMBERSHIP REQUIREMENTS FOR CLEARING MEMBERS	AVAILABLE ON DUBAI CLEAR WEBSITE <u>HTTPS://WWW.DUBAICLEAR.AE/DOCS/DEFAULT-SOURCE/DUBAI-</u> <u>CLEAR/MARKET-MEMBERS-REQUIREMENTS-FOR-CLEARING-</u> <u>MEMBERSHIP-ENGLISH.PDF?SFVRSN=50FACB81_0</u>
DUBAI CLEAR DEFAULT RULES	AVAILABLE ON DUBAI CLEAR WEBSITE HTTPS://WWW.DUBAICLEAR.AE/DOCS/DEFAULT-SOURCE/DUBAI- CLEAR/DUBAI-CLEARCCP-RULEBOOKDEFAULT- RULES.PDF?SFVRSN=A4F12581_0
PFMI: DISCLOSURE FRAMEWORK AND ASSESSMENT METHODOLOGY	AVAILABLE ON THE IOSCO WEBSITE AT: <u>HTTP://WWW.IOSCO.ORG/LIBRARY/PUBDOCS/PDF/IOSCOPD396.PDF</u> AVAILABLE ON THE IOSCO WEBSITE AT:
PFMI	HTTP://WWW.IOSCO.ORG/LIBRARY/PUBDOCS/PDF/IOSCOPD377- PFMI.PDF
UAE COMMERCIAL COMPANY'S LAW	AVAILABLE ON UAE MINISTRY OF ECONOMY WEBSITE <u>HTTPS://WWW.MOEC.GOV.AE/EN/COMPANIES-LEGISLATIONS</u>
UAE NETTING LAW	AVAILABLE ON UAE MINISTRY OF JUSTICE WEBSITE HTTPS://ELAWS.MOJ.GOV.AE/UAE-MOJ_LC-EN/00_BANKS/UAE-LC- EN_2018-09-23_00014_MARKAIT.HTML?VAL=EL1
UAE BANKING ACT	AVAILABLE ON CENTRAL BANK OF UAE WEBSITE <u>HTTPS://WWW.CENTRALBANK.AE/MEDIA/5EKHOJNO/DECRETAL-</u> FEDERAL-LAW-NO-14-OF-2018-16-9-2021-E.PDF
REGULATION OF THE CENTRAL CLEARING PARTY (CCP) BUSINESS	AVAILABLE ON SCA WEBSITE HTTPS://WWW.SCA.GOV.AE/EN/REGULATIONS.ASPX

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