BURSA MALAYSIA DERIVATIVES CLEARING BERHAD

PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES

DISCLOSURE FRAMEWORK

Responding Institution:

Bursa Malaysia Derivatives Clearing Berhad

Jurisdiction(s) in which the FMI operates:

Malaysia

Authority regulating, supervising, or overseeing the FMI:

Securities Commission Malaysia

The date of this disclosure is 30 June 2019

This disclosure can also be found at:
https://www.bursamalaysia.com/trade/risk_and_compliance/pfmi_disclosure

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Abbreviations:

AUD	Australian Dollar
BCP	Business Continuity Plan
BMD	Bursa Malaysia Derivatives Berhad (the derivatives exchange)
BMDC	Bursa Malaysia Derivatives Clearing Berhad (the derivatives clearing house)
BM Depo	Bursa Malaysia Depository Sdn Bhd (the central depository)
BMS	Bursa Malaysia Securities Berhad
BNM	Bank Negara Malaysia (the central bank of Malaysia)
Board	Board of Directors
Bursa Malaysia	Bursa Malaysia Berhad (the EHC)
EHC	Exchange Holding Company
CA	Companies Act 2016
CCP	Central Counterparty
CEO	Chief Executive Officer
CF	Clearing Fund
CME	Chicago Mercantile Exchange
CMEGSI	CME Group Strategic Investments LLC
CMSA	Capital Market and Services Act 2007
GST	Goods and Services Tax
CP	Clearing Participant of BMDC
CPU	Central Processing Unit
CSD	Central Securities Depository
DCP	Direct Clearing Participant
DCS	Derivatives Clearing & Settlement System
DMC	Default Management Committee
DR	Disaster Recovery
DSA	Digital Signature Act 1997
EA	Evidence Act 1950
EOD	End-of-day
ERM	Enterprise Risk Management
ERMPF	Enterprise Risk Management Principles & Framework
ERMPG	Enterprise Risk Management Process & Guidelines
EUR	Euro
FKB3	3 Month Kuala Lumpur Interbank Offered Rate Futures
FMG3	3-Year Malaysian Government Securities Futures
FMG5	5-Year Malaysian Government Securities Futures
FMGA	10-Year Malaysian Government Securities Futures Contract
FCPO	Crude Palm Oil Futures
FGLD	Gold Futures
FKLI	FTSE Bursa Malaysia KLCI Futures
FM70	Mini FTSE Bursa Malaysia Mid 70 Index Futures
FPKO	Crude Palm Kernel Oil Futures
FPOL	USD RBD Palm Olein Futures

FTIN	USD Tin Futures
FUPO	USD Crude Palm Oil Futures
GBP	British Pound Sterling
GCP	General Clearing Participant
Group	Bursa Malaysia and its subsidiaries and/or associated companies
HKD	Hong Kong Dollar
ISO	International Organization for Standardization
IT	Information & Technology
JPY	Japanese Yen
KPI	Key Performance Indicator
MARC	Malaysian Rating Corporation Berhad
MYR	Malaysian Ringgit
NRC	Nomination and Remuneration Committee
OCPO	Options on Crude Palm Oil Futures
OKLI	FTSE Bursa Malaysia KLCI Options
PFMI	Principle for Financial Markets Infrastructures
PLC	Public Listed Company
PO	Participating Organisation
RAM	Rating Agency Malaysia
RENTAS	Real Time Electronic Transfer of Funds and Securities
RMB	Renminbi
RMC	Risk Management Committee
RTO	Recovery Time Objective
S&P	Standard & Poor
SBLC	Standby Letter of Credit
SC	Securities Commission Malaysia
SCMA	Securities Commission Malaysia Act 1993
SGD	Singapore Dollar
SICDA	Securities Industry (Central Depositories) Act 1991
SPAN	Standard Portfolio Analysis of Risk
SSFs	Single Stock Futures
TIM	Technology & Information Management
USD	United States Dollar
VaR	Value at risk

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I. Executive Summary

Bursa Malaysia Derivatives Berhad ("BMD") operates and maintains a derivatives exchange. On 17 September 2009, Bursa Malaysia Berhad (Bursa Malaysia) (the BMD's holding company) has entered into a strategic partnership with Chicago Mercantile Exchange ("CME") in a continuous effort to develop the Malaysian derivatives market, which has also involved the equity participation by CME (through CME Group Strategic Investments LLC ("CMEGSI")) in BMD. Since completion of the equity participation, both Bursa Malaysia and CMEGSI currently hold 75% and 25% of the equity interest in BMD respectively, while BMD holds 100% of the equity interest in Bursa Malaysia Derivatives Clearing Berhad ("BMDC"). The joint venture with CME allows BMD to license the settlement prices of the Crude Palm Oil Futures ("FCPO") to position Malaysia as the global price benchmark for the commodity and the distribution of Bursa Malaysia's products globally through the Globex electronic trading platform.

BMD operates under supervision of the Securities Commission Malaysia ("SC"), which is governed by the Capital Market and Services Act 2007 ("CMSA") and falls under the jurisdiction of the Ministry of Finance. BMD offers investors the security of trading on a regulated Exchange with infrastructure and regulations comparable to that of established markets worldwide.

BMDC as counterparty to all open contracts, undertakes responsibility towards its Clearing Participants ("CPs") who are the party to those contracts that it will perform its obligations under the contract. The undertaking is backed by BMDC's risk management framework as well as the funds held for such purpose. Hence, the following policies are in place to address and manage various risks:

- Margining and performance bond requirement;
- Daily mark-to-market and settlement;
- Intra-day real time monitoring;
- Segregation of client funds;
- Security deposit and clearing fund requirement, and;
- CP exposure monitoring.

BMDC currently adopts a stringent risk management and financial safeguard standards for the market to minimise the possibility of a default by its CPs. However, in the event of disciplinary and default situations, BMDC is authorised to take actions pursuant to the BMDC Rules. Please refer to Principle 13 for more information on the Participant-default rules and procedures.

This document aims to provide an overview of the relevant disclosure and explains how BMDC is aligned with and observes:

1. The Principles for Financial Market Infrastructure ("PFMI") developed by the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of Securities Commission ("CPSS-IOSCO").
2. The Securities Commission Malaysia's Guidelines on Financial Market Infrastructures.

II Summary of Major Changes Since the Last Update of the Disclosure

This document is an update to the version dated June 2018, published as recommended by the PFMI and to continuously assist understanding of BMDC's profiles as well as risk management practices. Changes to BMDC's organisation, services, design, rules, markets served and regulatory environment since the last disclosure are summarised as follows:

- Amendments to the Clearing Participants' Directives No. 5-001 consequential to Securities Commission Malaysia's Guidelines on Contracts for Difference with effect from 1 July 2018;
- Revamp of the Rules of Bursa Malaysia Derivatives Clearing Berhad with effect from 15 August 2018;
- Revamp of the Clearing Participants' Directives with effect from 15 August 2018;
- Amendments to Appendix 6 (Specified Position Limits) of Clearing Participants' Directives No. 5-001 in relation to the Introduction of the Mini FTSE Bursa Malaysia MID 70 Index Futures Contracts with effect from 27 August 2018.
- Amendments to the Rules and Directive of Bursa Malaysia Derivatives Clearing consequential to repeal of Goods and Services Tax pursuant to the Goods and Services Tax (Repeal) Act 2018 with effect from 1 September 2018;
- Acceptance of top 100 stocks by market-cap listed in the Bursa Malaysia Securities Berhad ("BMS") as margin collateral starting from 26 June 2019 (see Principle 5).

III BMDC Background Information

General Description of the FMI and the Market it Serves

BMDC, which is established on 9 September 1995, is majority-owned by BMD. BMDC is an approved Clearing House for the Malaysian derivatives market under supervision of the SC and is governed by the CMSA. It acts as a CCP for all derivatives trades executed in BMD. BMD offers 3 categories of derivatives contracts include Commodity Derivatives (Crude Palm Oil Futures ("FCPO"), Gold Futures ("FGLD"), USD RBD Palm Olein Futures ("FPOL"), Crude Palm Kernel Oil Futures ("FPKO"), USD Crude Palm Oil Futures ("FUPO"), Options on Crude Palm Oil Futures ("OCPO") and USD Tin

Futures (“FTIN”)), Equity Derivatives (FTSE Bursa Malaysia KLCI Futures (“FKLI”), Mini FTSE Bursa Malaysia Mid 70 Index Futures (“FM70”), FTSE Bursa Malaysia KLCI Options (“OKLI”) & Single Stock Futures (“SSFs”)) and Financial Derivatives (3 Month Kuala Lumpur Interbank Offered Rate Futures (“FKB3”), 3-Year Malaysian Government Securities Futures (“FMG3”), 5-Year Malaysian Government Securities Futures (“FMG5”) and 10-Year Malaysian Government Securities Futures Contract (“FMGA”)) in the market. Its main product is FCPO which is the global price benchmark for the palm oil industry.

The CCP clears and settles derivatives contracts through the Derivatives Clearing & Settlement System (“DCS”). The DCS is a system that is used for the sole purpose of supporting derivatives clearing & settlement and risk management functions. These activities include transmitting clearing information to the CP, Derivatives Exchange and the SC. On top of that, the CPs also transmit clearing instructions to the CCP through the DCS.

Please refer to the monthly market statistic for the basic data and performance statistic on BMD at http://www.bursamalaysia.com/market/derivatives/market-statistics/historical-data/.

General Organisation of the FMI

The Board of Directors of BMDC has primary responsibility for the governance and management of the Company. In accordance with the Joint Venture Agreement between Bursa Malaysia and CME, matters of strategic importance are to be decided at the shareholders’ level i.e. Bursa Malaysia and CME levels. The constitution of BMDC provides that the Board of Directors (Board) of the company shall comprise 3 Bursa Malaysia Directors, 1 CME Director and 1 Independent Director. The Chairman of BMDC shall be one of Bursa Malaysia Directors. The Board of BMDC shall be accountable to Bursa Malaysia as the parent company and its partner, CME. Hence, the Chairman of BMDC provides regular business update to Bursa Malaysia Board.

BMDC adopts the Governance Model of Bursa Group where it is supported by various board committees namely, Risk Management Committee (“RMC”), Audit Committee (“AC”), Nomination and Remuneration Committee (“NRC”), Regulatory and Conflicts Committee (“RACC”), Market Participants Committee (“MPC”) and Appeals Committee (“APC”). The Terms of Reference of the Board Committees are available at Bursa Malaysia website http://www.bursamalaysia.com/misc/system/assets/24149/Governance-Model-Document-01072019.pdf

Legal and Regulatory Framework

The law and relevant rules governing the clearing and settlement activities in the derivatives markets are the CMSA, the Rules of BMDC, the Rules of BMD and the contract between BMDC and its Clearing Participants. BMDC, as an approved clearing house under the CMSA, is subject to regulatory oversight by the SC. BMDC's operations as a CCP is governed by the contract it has with its participants. All CPs enter into the derivatives contracts as principal regardless of whether they are acting on behalf of a client or not.

Please refer to Principle 1 for the legal basis for each material aspect of BMDC's activities.

System Design and Operations

Clearing Systems

BMDC clears and settles derivatives contracts through the DCS.

The following information/data are provided to the CPs through the DCS:

- Matched trades and open positions (real time).
- Financial information: cash and collateral (available real time).
- Risk related information: performance bond requirement for each client's account and risk arrays for margining (end-of-day and intra-day).
- Financial requirement: clearing fund contribution, security deposit and additional deposit (available real time).
- Physical delivery: allocation of delivery receipts and payable amount (available real time).
- Settlement parameter: daily settlement price and theoretical variable (available real time).

Clearing Process

BMDC's clearing and settlement procedure is an on-going process where it receives online trade data on real time basis from the exchange and conducts all post-trade transactions on the DCS. Fees such as the exchange levy and clearing fee are posted daily to the CP.

During end-of-day ("EOD") processing, BMDC will determine the settlement prices, the performance bond requirements on open positions, the value of the collateral lodged, the cash position of each CP and the settlement variation. The clearing and settlement cycle shall be completed when BMDC collects funds from its CPs with cash shortages and make payment to CPs with surplus on request.

The settlements of funds are conducted through the RENTAS system. The RENTAS system is operated by Payments Network Malaysia Sdn Bhd ("PayNet") which is a subsidiary of Bank Negara Malaysia ("BNM").

IV Disclosure of 24 Principles for BMDC

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.***
Summary narrative	The high degree of certainty in the legal framework for the relevant material aspects of the BMDC's activities stems from the clear and unambiguous law, rules and contractual arrangements between BMDC and its CP. The legal framework governing BMDC's activities consists of the CMSA, BMDC Rules, BMD Rules as well as the contractual agreement between BMDC and its participants. In addition, certain aspects relating to the activities of BMDC are governed by the provisions of the Evidence Act 1950 ("EA"), the Digital Signature Act 1997 ("DSA"), the Contracts Act 1950 and the Securities Commission Malaysia Act 1993 ("SCMA"). The legal basis (and consequently, the legal certainty) for each of the key aspects of BMDC's activities is properly provided in the following manner: (a) Finality: The BMDC Rules bind the CPs to the open contracts in the system and all settlements are deemed final and irrevocable. In addition, the CMSA provides protection from insolvency proceedings impacting BMDC's default procedures. The BMDC Rules specify insolvency of a CP as a circumstance upon which a default would be triggered. (b) Netting: Pursuant to the BMDC Rules, BMDC may set off any amount due from a CP to BMDC against any amount due from BMDC to the CP. (c) Novation: The BMDC Rules describes the novation process and the point of novation as the moment when the market contract is accepted for registration by BMDC. (d) Rights and interests in financial instruments: Under the BMDC Rules, BMDC determines and collects margin from the CPs and the BMDC Rules also provide for the manner in which collateral for margin is to be pledged with BMDC. In the event of a default by a CP, the BMDC Rules provide that BMDC may liquidate the collateral

	and set-off the amounts realized against any loss incurred by BMDC or novating the rights and obligations under the open contracts of the participant in default. (e) Default handling procedures: The BMDC Rules specify the default handling procedures - the events that constitute default and the rights of BMDC in the event of a default by a CP including the handling of open contracts and any pending settlements. The CMSA provides that the default procedures of a clearing house shall not be regarded as invalid on the ground of inconsistency with the provisions relating to the distribution of the assets of a person under the laws of insolvency. (f) Applicability of the BMDC Rules: The BMDC Rules are binding on the CPs by virtue of the contractual relationship between the parties. (g) Regulation and oversight of BMDC: BMDC is an approved derivatives clearing house under Section 38(4) of the CMSA and is subject to regulatory oversight by the SC. The SC's role to supervise and monitor the activities of any clearing house is stipulated in section 15(1)(f) of the SCMA. (h) Other aspects: Aspects relating to the collection of margins, the settlement process, the establishment of clearing fund, the delivery procedures and the financial requirements for participants as described in the BMDC Rules. (i) Relevant jurisdiction: BMDC is incorporated in Malaysia and the participants of BMDC, including foreign institutions are subject to Malaysian laws. Consequently, the relevant jurisdiction is only Malaysia. The BMDC Rules are approved by the SC except for rule changes which are editorial or consequential in nature pursuant to changes made to other relevant rules approved by the SC that have been specifically exempted from the SC's approval. BMDC also has a process to seek external legal opinions where necessary, to ensure the enforceability of the relevant rule or contract. These processes ensure that the BMDC Rules are clear, understandable, enforceable and consistent with the Malaysian legal framework. The rule-making process is a robust one, involving benchmarking, analysis, review and consultation to ensure that BMDC arrives at balanced and proportionate rules. Specifically, the rules are formulated based on a multi-tiered internal process which includes:

	(a) consideration of the regulatory objectives to be achieved, concerns to be addressed and the implications of the proposed rule amendments; (b) benchmarking the proposed rule amendments to those of other more developed markets and which has a similar framework so that the rules are on par with international standards, where applicable; (c) consultation with the relevant stakeholders, including market participants and at times the public to ensure that the rules are clear, practical and are aligned with stakeholders' expectations; (d) review of the proposed rule amendments by qualified staff, senior management and chief regulatory officer prior to review or approval by a management regulatory committee; and (e) for major rule amendments, approval is also by a board regulatory committee, comprising Bursa Malaysia 's board members who are professionals and market experts from the various related fields of the capital market. The BMDC Rules are publicly available at the Bursa Malaysia website: www.bursamalaysia.com. In addition, all CPs are notified of any amendments to the rules via circulars. The operational procedures are readily accessible by the participants of BMDC via eRAPID, a web-based solution to facilitate electronic transmission of circulars containing these operational procedures as well as other notices addressed to the CPs. These operational procedures are not publicly available.
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.***	
Summary narrative	The Board of BMDC has primary responsibility for the governance and management of the Company, and fiduciary responsibility for the financial health and business sustainability of the Company. The roles, responsibilities, structure and processes of the Board of BMDC are set out in the Board Charter of BMDC.

	BMDC is a majority-owned subsidiary of the BMD which provides, operates and maintains a derivative exchange. The BMD is a subsidiary of Bursa Malaysia which holds 75% equity interest whereas 25% by CME. Bursa Malaysia is an approved Exchange Holding Company ("EHC") under section 14 of the CMSA. Bursa Malaysia is also a Public Listed Company ("PLC") on the Stock Exchange and as a PLC, it is required to comply with the corporate governance practices as stipulated under the Main Market Listing Requirements of the Stock Exchange. As an EHC, Bursa Malaysia's objectives are reflective of its duties and responsibilities under the CMSA amongst others, to ensure there are orderly, clear and efficient clearing and settlement arrangements for any transaction in derivatives cleared or settled through the facilities of any of subsidiaries that is duly approved as a central house for derivatives exchange. The CMSA also requires Bursa Malaysia as an EHC to ensure prudent risk management of its business and operations, and it shall prioritise public interest over its commercial business interests. The objectives of BMDC also follow directly from the CMSA which requires approved clearing houses like BMDC to ensure that there are orderly, clear and efficient clearing and settlement arrangements for transactions in derivatives. The CMSA also requires clearing houses like BMDC to prioritise public interest over its commercial business interests. The objectives of BMDC are clearly set out in its constitution, particularly having regard to the requirements under the relevant securities law which primarily require sufficient financial, human and other resources to ensure the clearing house is having adequately and properly equipped premises, competent personnel for the conduct of its business and automated system with adequate capacity, security arrangements and facilities to meet emergencies, so as to enable efficient protection of investors as well as to act for the public interest. The current Board of BMDC comprises four (4) directors of which two (2) are representatives of Bursa Malaysia, one (1) is representative of CME and one (1) is independent director. The profile of the current Board of BMDC is available at the Bursa Malaysia website http://www.bursamalaysia.com/corporate/about-us/board-of-directors/board-of-directors-of-subsidiaries/bursa-malaysia-derivatives-berhad/. The Board Charter provides the detailed roles and responsibilities of the Board of BMDC. The specific responsibilities of the Independent Director and the management of conflict of interest are also specified therein.

	Under the Governance Model of the Group, the Board of BMDC is supported by various board committees, namely, the Governance Committees (including AC, RMC and NRC) and Regulatory Committee (including RACC, MPC and APC). Each year a board performance evaluation is carried out by the NRC for Bursa Malaysia Board, and the scope of this exercise is extended to BMDC Board as a functional Board of a subsidiary within the Group. Every three (3) years an external consultant is engaged to conduct this evaluation. For the intervening two (2) years, the company secretary carries out the review. The review exercise encompasses the evaluation of the Board's performance as a whole, performance of the Committees, individual directors and the Chairman as well as a review of the Board's size, composition, mix of skills/experience/qualities and training/development needs. The NRC co-ordinates this review and presents the findings to the Board of Bursa Malaysia. The interest of shareholders, users and the public are addressed through the balanced Board structure at Bursa Malaysia as well as BMDC. The NRC has conducted rigorous review on the membership classification for the Board of BMDC and further reviewed the suitability of Bursa Malaysia directors and external independent individuals, to sit on the Board of BMDC, taking into consideration the derivatives industry experience, knowledge and expertise to enable their contribution to the development and growth of business and operations. BMDC adopts the Board Remuneration Policy of Bursa Malaysia. The recruitment process for all senior positions includes interviews with the senior management, the Chief Executive Officer ("CEO") and HOGAN & Virtual assessment. In addition, detailed reference checks are conducted. The CMSA requires Bursa Malaysia to ensure that the staff has the requisite knowledge. Bursa Malaysia has incorporated this into its Human Resources policies and ensures that all the senior management staff has all the requisite skills. Bursa Malaysia also attempts to maintain a pool of internal successors in the ratio of 1:2 for all senior and critical positions. There is a well-established performance evaluation process against Key Performance Indicators for all employees. The performance of the CEO is assessed by the Board and that of the senior management by the NRC in consultation with the CEO. The performance evaluation process is used to guide the career growth and if need be any termination. A clear and documented Enterprise Risk Management ("ERM") framework at the Group level is used to identify and monitor the specific business risk for each business entity. The

	Risk & Compliance division ensures that Bursa Malaysia has an effective framework and ability to manage all risks as a fully integrated part of the organisation including its subsidiaries. Risk & Compliance reports to the RMC. Internal Audit division is independent from all other functions within the Group and reports directly to the AC. Bursa Malaysia adopts a consultative and inclusive approach to take into account the interest of its participants and other relevant stakeholders in its decision making in relation to its design, rules, overall strategy and major decisions. Prior to initiating changes to its system, services, operations and rules, Bursa Malaysia conducts consultation with its participants and other related users of the system and services. Further, any proposed amendments to rules are subject to the SC's approval. In practice, all major rules amendment submission to the SC for approval requires Bursa Malaysia to obtain feedback from the industry and other relevant users via a consultation process. All rules and amendments are publicly available at the Bursa Malaysia website. Operational procedures for clearing and depository participants are disseminated to all clearing and depository participants via circulars.
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.***	
Summary narrative	The types of risk that can arise in BMDC are: (a) Credit and liquidity risks arising from its role as the CCP for the derivatives market; (b) Operational reliability risks that could prevent it from discharging its responsibility as a CCP; and (c) The general business risks for BMDC are to a large extent subsumed in the overall business risk for the Group. Each business owner is responsible for identifying the risks of their business processes are exposed to, measuring and monitoring the risk indicators and identifying risk management measures and implementing them. The Group has put in place an established risk management framework for managing risks affecting its business and operations which are aligned with the ISO 31000:2009 Risk Management – Principles and Guidelines and the IOSCO-PFMI as validated by an external consultant in 2017.

	The Group's risk management framework is embedded in the Enterprise Risk Management Principles & Framework ("ERMPF") document. The risk management standards specified in the said document are applicable to all the business entities within the Group such as BMDC. The accountability, authority and responsibilities of the relevant parties in the Group for managing risk, including implementing and maintaining the risk management process and ensuring the adequacy, effectiveness and efficiency of any controls have been clearly outlined in the risk management framework. Within the framework, there is an established and structured process for the identification, assessment, communication, monitoring as well as continual review of risks and effectiveness of risk mitigation strategies and controls at the divisional and enterprise levels. The analysis and evaluation of Bursa Malaysia's risks are guided by the approved risk criteria. At the Group level, the Risk & Compliance division is comprised of three key departments namely Enterprise Risk Management, Business Continuity Management and Compliance Management. The objective of the set up was to consolidate the risk management and compliance functions across the Group to provide a holistic and integrated view of risk management and compliance at the enterprise wide level. The Enterprise Risk Management department covers four risk management units namely Operational Risk, Financial Risk (including credit and liquidity risk), Strategic Risk and Legal & Regulatory Risk. The RMC reviews the risk management aspects every quarter and tables all important developments and plans to the Board. In addition, the Internal Audit team reviews the adequacy of the risk management measures periodically. The Risk & Compliance division also conducts continual review of the risk management framework and process for improvement and ensure that they remain relevant to the Group. The rules of Bursa Malaysia clearly explain the requirements and responsibilities of the participants, and the responsibilities of Bursa Malaysia subsidiaries. Bursa Malaysia has established a group approach to supervise the ongoing compliance of the participants to the requirements of the BMSC, BM Depo and BMDC. The Participants Supervision Department of Bursa Malaysia is entrusted with the responsibility for managing this.

	The supervision approach combines a combination of off-site supervision and onsite inspections. As part of the off-site supervision - weekly, monthly and annual submission of various financial indicators and data is required. BMDC have identified the following entities that could pose material risks to it, i.e., participants, BM Depo, settlement banks and banks where the BMDC maintains its funds. BMDC leverages the Participant Supervision as explained in above paragraph to manage the risks arising from the participants. BMDC have established a methodology for selecting its banking partners, settlement banks and the banks whose bank guarantees and letter of credit it accepts. A combination of financial indicators like capital adequacy ratios, credit rating and operational services provided is used as part of this methodology. In addition, it has established bank-wise concentration limits for the various services it uses. Bursa Malaysia has a crisis management framework. This framework has identified four broad categories of scenarios that could significantly impair its operations: data errors, system downtimes, participant failures and operational lapses. There are various measures implemented to mitigate these risks. A key component of the risk management measure related to the system risk is to institute Business Continuity Plans and periodically test and revise them based on new development and the test findings. BMDC has constituted a Clearing Fund ("CF") which is intended to cover the default of two participants with the largest and next largest position. In the unlikely event of large scale participant defaults, BMDC is equipped with an established set of rules and procedures to manage such defaults. To further strengthen such safeguards, the Bursa Malaysia has already initiated the development of a Recovery Plan ("RP") to recover from uncovered losses and liquidity shortfall which aligns with the global standard of the "Recovery of financial market infrastructures" as set out by the IOSCO. The RP covers the exposures of BMDC and complements with the existing Principles for Financial Market Infrastructures standards issued by IOSCO which are observed by the BMDC. This will only serve to increase the resiliency and robustness of BMDC's existing risk management standards to withstand any eventuality of disorderly failure which can lead to severe systemic market disruptions. In addition, the RP provides a foundation for the establishment of a Resolution Plan to be initiated by the regulator to provide a comprehensive resolution in the unlikely event of a failed recovery process to ensure that critical services can continue to be offered to the market participants.

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Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposures 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 participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain 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 potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

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<tr><td>Summary narrative</td><td>

BMDC functions as the CCP for the derivatives market. In its role as the CCP, it is exposed to credit risk stemming from the potential inability of one or more CP to honour their settlement obligations. Hence, BMDC effectively measures, monitors, and manages its credit exposure to participants and those arising from its payment, clearing, and settlement processes by using a combination of initial margin, variation margin and establishing position limits. BMDC measures its exposure to the CPs at the end of each business day. In times of volatile market, the CCP performs intraday mark-to-market process, using the latest information snapshot from real-time trading activities and prices, to measure the exposure and collect the shortfall, if any, from the CPs.

In addition, BMDC has instituted a framework for managing its credit risk that comprises of the margin collateral collection, powers to call for the intraday margin, security deposit and clearing fund collection from each CP, stringent financial requirements to become a CP, and finally, clear and enforceable default rules. On top of that, BMDC has a robust mechanism for monitoring the liquidity and credit position of the CPs.

CPs are required to submit cash deposit information with financial institutions (both segregated and un-segregated accounts) and the available credit facilities on a weekly basis to BMDC via DCS. BMDC runs a simulation of potential intraday cash shortage for each CP and assesses the impact against the CPs' available cash in the bank and their credit facilities. This assessment is to analyse the CPs liquidity position and their ability to meet the margin call by BMDC when it is due. Besides that, BMDC monitors the CPs'

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	positions on an ongoing basis. It has the power and operational ability to establish position limits and informs any abnormal trends to the SC. A daily and intraday monitoring and hourly stress test on the adequacy of the clearing fund is conducted. Objective of the stress test is to ensure that there are sufficient financial resources in the Clearing House to cover default of two participants with the largest default exposure. The size of the Clearing Fund is reviewed on a monthly basis and BMDC will inform the SC if there is a need to increase the Clearing Fund size. The stress test model is reviewed annually, and in addition validated annually by an independent party. The daily stress test process is currently running at hourly interval by BMDC's Risk Management team starting at 8:30 a.m., which includes the following parameters: (a) Latest open positions of the CP; (b) Latest financial resources of CP held by the CCP; (c) Latest price movement in the market; and (d) Pre-defined stress scenarios – both historical extreme scenarios and hypothetical/forward-looking scenarios are used to evaluate the stressed outcome. In addition, the reverse stress test is also performed to identify sensible market conditions in which the entire waterfall resources available to BMDC may be insufficient to cover the potential exposure. It is a separate but complementary analysis to the regular stress test performed. The results of the stress tests are analysed by the risk management team and the CPs contributing to any excessive risk are required to place additional margin. This is communicated through a margin call placed through the system. The stress-test result is reported to the Director of Risk & Compliance, CEO of BMD, Chief Operating Officer and RMC. The result is also shared with the SC on quarterly basis. In the event the single largest loss starts to accumulate over a period of time beyond a threshold, taking into consideration other prevailing market factors, BMDC will communicate with the CPs concerned on the requirement for additional margin deposit. Besides that, BMDC has established the sequence of using the available resources for handling CP's defaults – "Water fall": (i) default participants' margin collateral; (ii) default participants' security deposit; (iii) default participants' contribution to the clearing fund; (iv) BMDC's contribution to the clearing fund; and (v) clearing fund contributions of the non-defaulting CP, if any event of default happens.

<table>
<tr><td></td><td>Following the stress test result, if there is a need to increase or vary the default waterfall resources, the proposal will need to be deliberated by the Risk Management Committee and approved Board of Directors.</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td>Summary narrative</td><td>BMDC has a well-defined collateral management process and policy to manage the CPs' credit exposure and ensure the collateral accepted has low credit, liquidity and market risks. BMDC does not accept cross-border collateral. Currently, BMDC accepts the following types of collateral from CPs to cover their margin requirements:

(a) Cash (MYR, USD, GBP, EUR, SGD, AUD, HKD, RMB & JPY);
(b) Standby Letter of Credit ("SBLC"); and
(c) Selected Malaysian equities - Currently top 100 stocks by market-cap listed in the BMS are accepted, starting from 26 June 2019.

A feasibility study will be conducted for acceptance of new collaterals based on requests from the CPs. The criteria used by BMDC in accepting the collaterals are:

(a) Ability to determine the price accurately and in a timely manner;
(b) Low volatility of collateral value; and
(c) The marketability of the collateral e.g. availability of liquid secondary market.

BMDC's collateral management system is designed to compute collateral value for margin coverage taking into consideration the appropriate haircut and latest mark to market prices. The system also computes collateral concentration ratio for risk monitoring purpose. In addition, BMDC performs a daily mark-to-market of the collateral posted and a daily back-testing of the adequacy and efficiency of the haircut rates for foreign currency collateral. On top of that, a quarterly review is conducted to further assess the adequacy and efficiency of the haircut rate model. The BMDC Rules empower BMDC to decide the valuation process and specify that any interest or gain on the collateral would be passed on to the CP at the discretion of BMDC.</td></tr>
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	The adequacy test assesses the performance of a set of proposed haircut rates against the exchange rate movements over the last 5 years, as well as period of stressed market condition in order to address procyclicality of haircut applied. The assessment takes into consideration the performance of the proposed rates in terms of the number of breaches and its efficiency level during the back-test period. This haircut setting model and procedure are validated annually by an independent party. As a prudential measure, the haircut rate for the equity collateral is set at the daily price limit which will adequately cover the maximum possible movement for the share value. The DCS allows user to set concentration limits for each type for collateral to avoid concentration risk. The review on concentration limits of shares accepted as margin collateral is carried out on a half-yearly basis; while the concentration limit of SBLCs' issuing banks is reviewed annually. All the collateral records are kept within BMDC's DCS are managed by BMDC staff, in accordance to a set of standard operating procedures.
Principle 6: Margin ***A CCP should cover its exposure to its participants for all products through an effective margin system that is risk-based and regularly reviewed.***	
Summary narrative	BMDC collects two types of margins to provide protection from the current exposures as well as from the potential future price increase exposures, i.e. settlement variation (variation margin) and initial margin (performance bond). The Standard Portfolio Analysis of Risk ("SPAN") methodology is used to determine the appropriate performance bond level for a portfolio of positions. The SPAN risk analysis model simulates potential market movement and calculates the potential profit or loss on a portfolio of combined commodity. The model organises all futures and options relating to the same underlying assets into one combined commodity group for analysis. Performance bond or margin requirements imposed by BMDC are determined using a risk-based algorithm, modelled to cover 1-day potential exposure under normal market circumstances at confidence interval of 99% value at risk ("VaR"). Volatility is assessed over 5-days, 30-days, 90-days and 240-days and margin rates are computed based on weighted VaR. In times of high volatility, BMDC performs intraday mark-to-market process. CPs are required to honour margin call within 1 hour upon being notified. Failure to honour margin call is treated as a default.

	In determination of the historical data period to be used in the margin model, BMDC takes into consideration of the historical volatility, recent volatility, price trend, market liquidity, seasonal, cyclical factors and other qualitative factors. In order to reduce the need for procyclical adjustments, buffers are added to maintain a stable and conservative margin rate. For new products without much history, BMDC simulates the potential volatility using data from the underlying assets or other highly correlated products. Alternatively, BMDC may also adopt theoretical model to derive reference prices for margining purpose. Higher margins are also required during long holiday periods to cover for more than one trading day period. The 1-day close-out period is reasonable for products with a liquid market. The additional buffer used for assessing margin for products with illiquid markets mitigates the need for prompt liquidation, thereby minimising the potential for adverse price effects. BMDC adopts a gross margining concept, the performance bond amount is calculated for each client separately and the client margin requirement is aggregated to the CP's level. The total performance bond requirement for a CP is the sum of the margin requirement for all the individual clients' accounts of the CPs. The proprietary position of a CP is margined on a net position. BMDC monitors the liquidity positions of the CPs closely. CPs are required to update their liquidity positions to BMDC on weekly basis via the DCS. BMDC uses this to ascertain the ability of CPs to honour settlement obligation to clearing house. Daily back-testing of margin rates is performed to ensure margins are adequate and efficient. The margin model is reviewed monthly and back-testing is performed to ensure the relevance of the parameter used. However, if there is any major event and change that warrant a change in the model, the Risk Manager will perform ad-hoc review. In addition, sensitivity analysis is done by applying different sets of inputs as parameters to the margin and using different outputs to guide in determining optimal margin level, which is carried out as part of the half-yearly model review. The BMDC margin system is also validated annually by an independent party. In the event that changes are required for any of the margin parameter, BMDC will communicate the same to the CPs via issuance of a CP Circular, whereby the circular is publicly available at the Bursa Malaysia website. The SPAN margining methodology adopted for BMDC margining procedure is available on Bursa Malaysia website.

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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.

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<tr><td>Summary narrative</td><td>

BMDC has a liquidity management framework that takes into account of its potential settlement obligations and its available financial resources. It aims to ensure availability of sufficient liquid resources to cover any calls for withdrawal of excess margin and the default of the CP with the largest exposure. The liquidity management framework effectively assists BMDC to measure, monitor, and manage its liquidity risk.

BMDC maintains its balances and takes intra-day overdraft facilities only from banks that provide online banking facility and are rated A by Rating Agency Malaysia ("RAM") and BBB by Standard & Poor ("S&P"). Eligible collateral accepted by BMDC includes cash, SBLC and selected equities. Interests are calculated daily and paid to CPs monthly.

BMDC conducts daily liquidity needs assessment at the beginning of the day after the first stress results are available. The liquidity needs assessment takes into account of the following considerations:

(a) Potential settlement failure of two CPs with the largest exposure;
(b) The ability to handle two-day's worth of daily average cash-out of excess margin placed by the CPs;
(c) 50% weight of the placement maturing today; and
(d) Its liquid resources.

Apart from this, BMDC has instituted daily liquidity stress test that includes the simulation of the unavailability of the largest credit line and withdrawal of 80% of the excess margin held in BMDC by CPs . Other scenarios that are being stress tested include wrong way risk whereby the failure of liquidity provider is simulated simultaneously with the failure of its affiliate companies. In addition, reverse stress test is performed to identify stress scenarios in which the entire liquid resources available to BMDC may be insufficient to meet its settlement needs.

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<tr><td></td><td>The liquidity framework is reviewed once a year and validated annually by an independent party.</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td>Summary narrative</td><td>The BMDC Rules clearly state transfer of funds between the CP and BMDC is final and irrevocable upon the crediting of BMDC's or the CP's bank account, whichever applicable. The CMSA protects the settlements processed by BMDC as an approved clearing house from the proceedings related to insolvency or bankruptcy.

The daily settlements are completed at 10:30 a.m. and are deemed final once the funds are credited. Intra-day margin calls are also processed with immediate finality. Furthermore, the BMDC Rules clearly states that contracts that have been accepted cannot be reversed.

The BMDC Rules clearly defines the point at which settlement is final and this has the backing of the CMSA and hence is protected at the level of law. Final settlement is achieved in real-time.</td></tr>
<tr><td colspan="2">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 risks arising from the use of commercial bank money.</td></tr>
<tr><td>Summary narrative</td><td>BMDC minimizes and controls credit and liquidity risks by using RENTAS system for funds settlement between BMDC and the Clearing Participants since July 2017 for all RM currency settlement. The RENTAS system is operated by Payments Network Malaysia Sdn Bhd ("PayNet") which is a subsidiary of BNM.

Settlement risk is mitigated in settlement process between BMDC and the Clearing Participants as RENTAS system facilitates payments between BMDC and the Clearing Participants on a real-time basis with finality.

For the US Dollar currency settlement, BMDC has appointed six (6) licenced banks as its settlement banks. BMDC has well-defined criteria for choosing the settlement banks as specified in the following:</td></tr>
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	• Licensed commercial banks approved by BNM • Provide real time online banking system • Provide intraday credit facility • Must be able to comply with BMDC's payment cut-off time. • Must have good credit standing - minimum of A for RAM and BBB for S&P Issuer Credit Rating and Bank Fundamental Strength Rating respectively. BMDC manages concentration risk of settlement banks by imposing exposure limit on each 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.***	
Summary narrative	BMDC has a robust delivery and collection process for Crude Palm Oil, Palm Kernel Oil and RBD Palm Olein futures contracts. BMDC has clear procedures describing the details of the physical delivery process includes the obligations of the buyer and seller; delivery procedures; payment procedures; and, exceptional procedures related to non-delivery/non-payment or non-acceptance of delivery. The risks associated with physical deliveries are well identified, monitored and managed by the system for delivery and collection. Deliveries are to be made to one of the approved Port Tank Installations ("PTI") in one of three approved sea ports namely, Port Klang, Butterworth and Pasir Gudang, between the first and 20th of the delivery month. The PTIs verify the quality of the delivery and issues a reference number to the seller and creates an Electronic Negotiable Storage Receipt ("e-NSR") in the system of BMDC. The details captured are: reference number, PTI location, delivery date, quality related information and validity date. The seller's broker provides this reference number to BMDC to discharge its delivery obligation. BMDC accepts this by matching the reference number with the details entered by the PTI. BMDC allocates the deliveries to the buyers on a pro-rata basis and then random allocations to the clients of the buyer. The buyers are notified of their allocations and are required to pay on T+1 day to their broker and the broker in turn pay to BMDC on T+2 day. The buyer is provided another reference number and BMDC records this reference number in the systems of the PTI.

	The margins of the buyers and sellers are collected until the seller and buyer performs their delivery and settlement obligation respectively. The margin of the seller is released after the seller make delivery (T day) and for the buyer only upon delivery settlement (T+2). All participants involved in the delivery process requires Government certification. On 24 May 2018, BMDC has implemented a new delivery procedure for US Dollar denominated RBD Palm Olein Futures ("FPOL") contract from Ex-Tank delivery to Free on Board ("FOB") delivery. FOB is an International Commercial term (Incoterms) that specify seller's obligation, costs and risk in a delivery process up to the loading of goods on to the ship. As such, buyer's obligation is to charter the ship, insurance and other logistic cost to the destination.
Principle 11: Central securities depositories ***A Central Securities Depository (CSD) should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.***	
Summary narrative	Not applicable
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.***	
Summary narrative	Currently, there is no transaction involving the settlement of two linked obligations. Products are settled by way of physical delivery for Palm Oil, RBD Palm Olein and Palm Kernel Oil. As for non-delivery products, settlement is by way of cash.
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.***	
	BMDC has default management rules and procedures in place to cope with a CP's default which identifies the roles and responsibilities of various stakeholders. The BMDC Rules state clearly the grounds for default and the actions that can be taken by BMDC. Section

	43 of the CMSA provides that the default proceedings of the clearing house to take precedence over the Law of Insolvency. The BMDC Rules specify the occurrence of any of the below scenarios in relation to a CP as grounds to invoke default procedures: (a) Failure to meet in full a call for Margin; (b) Failure to pay a Premium under Rule 700 of the Rules of BMDC or any settlement difference pursuant to Rule 608 or 612 of the Rules of BMDC; (c) Failure to promptly meet its obligations under the terms of an Open Contract; (d) Failure to meet in full its Clearing Fund Contribution; (e) Where applicable, failure to meet in full its Direct Clearing Participant Deposit; (f) Cease to be an Affiliate of an Exchange due to termination of its membership by such Exchange or its membership of an Exchange is suspended; (g) Is unable to pay its debts as and when they fall due in the ordinary course of business; and (h) File a petition for the winding up of its affairs, or, has been ordered to wind up its affairs (voluntary or involuntary winding up). Default drill is conducted yearly by BMDC with its CPs to ensure the effectiveness of the default management procedures as well as to assess the CP's readiness. In addition, the default management procedures are also reviewed as and when there are significant local or international developments. There is a defined default waterfall structure that stipulates the sequence of financial resources that BMDC can draw in the event of CP's default. The rules empower BMDC to draw promptly on the available financial resources - in its default management actions. The rules allow BMDC to liquidate open positions of the defaulting CP at any time. Based on the waterfall structure, BMDC will liquidate the defaulting CP's margin and collateral, security deposit and contribution to Clearing Fund to set off the losses (defaulted amount), followed by BMDC's contribution to Clearing Fund and lastly, remaining Clearing Fund contributed by non-defaulting participants. If non-defaulting CPs' contribution to the Clearing Fund has been utilised, BMDC will issue a statement to inform the non-defaulting CPs of their shares of losses and the non-defaulting CPs are required to replenish the clearing fund within one business day upon being notified.

	In addition, BMDC has developed a Default Management Procedure which clearly articulates the roles and responsibilities of various stakeholders and the procedures to handle CP's default and the setting up of Default Management Committee ("DMC"). In the event of default, DMC will carry out the following: (a) To declare a default; (b) To deliberate the appropriate actions to be taken by BMDC; (c) To manage communication with other stakeholders. The default procedures are disclosed in the Rules of BMDC at Bursa Malaysia website.
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.***	
Summary narrative	The BMDC Rules and the CMSA require all clients' assets to be segregated from the CP's own assets and require the CP to have prior customer instructions to use the clients' accounts. CPs are required to manage their clients' fund, collateral and margin. BMDC does not manage the clients' collaterals and funds directly as it relies on the CPs' internal records. BMDC only calculates the margin for each client's account separately and sums it up as a requirement for the CP. The exception is where BMDC accepts a SBLC (pass through) directly from the CP's client. BMDC does not have direct access to the CPs' books, however, in the event of invoking the default procedures; it has the powers to require the CP to help BMDC in segregating the clients' funds, positions and collaterals. BMDC computes collateral on a gross basis at the client level, hence it has the required information to assist it in segregating client level collaterals. BMDC has tested its ability to port the positions of a defaulting CP to another CP during one of its annual default event drills. In addition, the CPs are audited by the Bursa Malaysia's Participants Supervision team periodically. The BMDC Rules are available at the Bursa Malaysia's website. Besides that, clearing participantship standard and financial requirements are mentioned in the financial safeguards and risk management section at the Bursa Malaysia website.

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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.

</td></tr>
<tr><td>Summary narrative</td><td>

Bursa Malaysia is guided by the ERMPF and the Enterprise Risk Management Process & Guidelines ("ERMPG") documents to identify, assess, control, monitor and report key risks under the ERM framework which also cover General Business Risks. The oversight, responsibilities and accountability of the risk management process are defined by Bursa's risk governance structure where key risks are managed by the three lines of defense comprising the line managers, risk management and internal audit. These risks are regularly reported to the management of Bursa Malaysia, the Management Risk and Audit Committee, the RMC and the Board.

Amongst others, the review of the annual business plan which include strategic planning and annual budgeting plays a significant role in the management of both internal and external General Business Risks of Bursa Malaysia. The risk areas relating to General Business Risks under the ERM framework include:

(a) The administration and operation of the Group as a business enterprise which could impair the business of Bursa Malaysia;
(b) Potential risks which can cause the decline in Bursa Malaysia's revenue, growth in expenses or loss charges against capital;
(c) Business impairment resulting in adverse reputational effects;
(d) Poor execution of business strategy;
(e) Fluctuations in macroeconomic and market activities;
(f) Ineffective talent management;
(g) Lack of technology and product innovation;
(h) Legal and regulatory changes to the business landscape.

In addition, Bursa Malaysia monitors the general business risk on its financial position for its subsidiaries including BMDC to ensure quality and sufficient liquid net assets are maintained to meet its obligations. On a stand-alone basis, BMDC maintains liquid net assets to cover at least 6 months of operating expenses. These funds are held in bank

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	deposits with pre-approved financial institutions ("FIs"). BMDC's investment policy and practices are further explained in Principle 16 below. Given that BMDC is majority-owned by the holding company Bursa Malaysia, the holding company is readily available to inject equity capital into BMDC if required. In addition, the holding company, being a listed entity, may raise additional funds via the capital market for injection of equity capital to BMDC.
Principle 16: Custody and investment risks ***An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.***	
Summary narrative	Bursa Malaysia Group is guided by the principal objective to invest CCP members' funds and clearing funds in highly liquid, short term investments with high credit standing and low market risk. This is to ensure timely access to funds at all times. Under Bursa Malaysia Group's investment policy, BMDC is only allowed to invest in deposits or placements with pre-approved financial institutions that meet strict credit requirements (and within the counterparty limits), money market and fixed income instruments that meet Bursa Malaysia's stringent credit parameters, and securities issued by or guaranteed by Malaysian government or the Malaysian Central Bank. Nevertheless, BMDC remains conservative by investing participants' assets and its own assets only in highly liquid and short-term deposits with pre-approved financial institutions ("FIs"). The investment policy also restricts the investments in foreign-currency denominated assets, whereby for participants' assets, BMDC is only permitted to invest in the same foreign currency in which funds were received to minimise foreign exchange exposure risk. Investments in currencies different from the participants' funds are strictly prohibited. As of end of June 2019, majority of investments were MYR-denominated, with the FIs being incorporated in Malaysia and supervised by BNM. BMDC has prompt access to these assets with low credit, liquidity and market risks. The investment policy sets out stringent credit parameters for approved FIs (such as capital adequacy and credit rating), and the single counterparty exposure limit in each FI. There is no significant exposure to a single FI, as BMDC adheres to the exposure limits which aim to spread out exposures to multiple counterparties. In addition, the list of approved banks

	and exposure limits are reviewed at least, on an annual basis or as and when required (e.g. in adverse financial condition). The investment policy is consistent with the BMDC rules. Besides cash deposits, BMDC holds its equity collateral in BM Depo in a central depository managed by Bursa Malaysia. The collateral is only used by BMDC as part of executing its default procedures. The BMDC Rules state that all interests and other benefit accruing from the underlying asset provided for margin purposes would accrue to the CP. In addition, the BMDC Rules allow the CP to replace collaterals placed for margin.
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.***	
Summary narrative	The Risk & Compliance division has established an ERMPF, designed based on ISO 31000, Risk Management – Principle and Guidelines. One of the risk categories classified in the ERMPF is Operational Risk which is defined as risks arising from deficiencies in information systems or internal processes, human errors, management failures, or disruptions from external events that could result in the reduction, deterioration, or breakdown of services provided by the Group. The ERMPF is supported by the ERMPG. The ERMPG serves to guide the Group in identifying, monitoring and managing the risks it faces in the course of achieving its operations, strategic and business objectives. In the contexts of operational risk, the risk assessment process involves identifying major processes, measuring risk events in terms of likelihood of occurrence and impact and management of current mitigation controls that are in place and action plans if needed. The ERMPF which was approved by the Board defines the roles and responsibilities of the relevant parties including the Board, the RMC and the Management, respectively for managing risks and implementing risk management processes, and ensuring the adequacy and effectiveness of risk mitigation controls. The Board have tasked the RMC with the responsibility of ensuring that the risk management framework of the Group operates effectively. Periodically, the Board will receive updates from the RMC on the progress and assessment of risk management of the Group. The operational risk of Bursa Malaysia is strengthened by the following frameworks, amongst others:

a) Operational Risk Framework:
   i. A common definition and risk categories to enable a uniform understanding and consistent approach of managing operational risk across the Group;
   ii. A governance and oversight structure for operational risk;
   iii. Roles and responsibilities including reporting lines;
   iv. A sound operational risk management approach and process by introducing methodologies/tools and techniques to perform risks assessment/ analysis/ treatment/ monitoring and reporting in a structured, systematic and consistent manner; and
   v. Effective communication to cultivate operational risk awareness building.

b) Cyber Security Risk Management Framework:
   i. To create a common approach for addressing cyber security within Bursa Malaysia; and
   ii. To ensure cyber security risks are properly managed throughout Bursa Malaysia.

c) Anti-Fraud, Bribery & Corruption Policy:
   i. To assist Bursa Malaysia to adopt a pragmatic approach to assess, detect, prevent and respond to fraud, bribery and corruption within the organisation.
   ii. Bursa RCSA questionnaires explicitly probes for potential risk of fraud, bribery and corruption in Bursa staff operational activities within and with external parties.

d) Risk Management Framework on Outsourcing:
   i. To define the required environment and organizational components for managing outsourcing risk in a structured, systematic and consistent manner within Bursa Malaysia; and
   ii. The framework describes three key elements for an appropriate outsourcing risk management i.e. Outsourcing Lifecycle, Risk Governance and Oversight Structure, and Risk Management Practices.

BMDC clears and settles derivatives contracts through the DCS. The DCS is a system that is used for the sole purpose of supporting derivatives clearing and settlement and risk management functions. Henceforth, the operational reliability objectives of BMDC is dependable on the performance of the DCS. The DCS is adequately equipped to support the derivatives clearing and settlement process. The DCS is being maintained regularly to ensure a high degree of security, performance, operational reliability and scalable capacity. This is achieved through IT initiatives undertaken by Bursa Malaysia’s Technology &

	Information Management ("TIM") together with the ongoing support and maintenance arrangements with IT vendors. For instance, the performance of the DCS is measured and monitored at its average and peak CPU utilization level, whereas its capacity is observed via its average and maximum daily trade transactions processing. Based on the total derivatives contracts done by BMD over the last few years, the DCS is able to sufficiently meet the scalable capacity adequacy to handle increasing volumes and its service-level objectives. There was no breach on the capacity limits of the DCS. To ensure the reliability and availability of the DCS system, the following controls are in place: (a) Incident Management and Problem Management procedures are available. All incidents are centrally logged into the Enterprise Service Management system and categorised by priority. Incidents are escalated to relevant IT support teams, CME and respective vendors with 24/7 support service for resolution. (b) All major components of DCS are in cluster mode at the main site and it has redundant servers at Bursa Malaysia Disaster Recovery ("DR") Site. This is to cater for high availability and reliability of the system. (c) Performance of the system is monitored using specific monitoring tools which have alert capabilities to trigger alarms in the event that thresholds are being breached. (d) Quality assurance of the changes to the system undergoes testing by vendors and internal users. For critical and major changes, an industry wide mock testing is conducted with the market participants. (e) Change management process is in place where all changes to the system are centrally logged to the Enterprise Service Management system, managed and assessed in respect of impact and risk of the change to the system. Audit engagements and independent reviews are carried out by Internal Audit on operational systems, processes, policies and procedures based on an annual audit plan approved by the Audit Committee. All key operational areas and processes are audited within a cycle of three years with higher frequency of coverage depending its criticality and Internal Audit risk assessment. Using a risk based audit approach, Internal Audit assesses the selected areas under the audit scope in relation to effective mitigation of risk exposures,

	compliance towards the approved policies and procedures and relevant laws and regulations as well as improvement to the overall internal control system. As part of the risk-based audit plan, Internal Audit also conducts system readiness reviews to ensure that due process has been complied with prior to the implementation or launch of significant systems development and enhancement projects. Post implementation reviews are also conducted after a predefined period to assess the realised benefits of the implemented significant systems and projects. Physical and information security and policies are in place to ensure the confidentiality, integrity and availability of information and systems. The policies encompass areas of governance, identification, protection, detection, and recovery controls for the organisation. Bursa Malaysia have implemented appropriate protective controls to minimize the likelihood and impact of a cyber-attack on critical business functions and information assets. The controls for physical and logical access are the following: (a) Entry into data centers and sensitive areas are controlled using combination of access cards and security identification codes and restricted only to authorised personnel; (b) Super IDs or Privilege-IDs are controlled and managed by privilege-ID management system; and (c) System and data owners identified and access matrix defined; access to confidential and restricted information on need basis and upon approval. Information Security Management System (“ISMS”) Bursa Malaysia is certified with ISMS - ISO 27001:2013 for Derivatives Clearing Services. The ISMS surveillance assessment was completed in February 2019. On 29 April 2019, the Cyber Security Strategy Roadmap (CSSR) was formalised. The CSSR is a 3-year (2019-2021) roadmap and actions designed to continuously improve the cyber security preparedness and resilience of Bursa Malaysia’s infrastructure and services. This is in line and to support the overall business strategy and business plans of the Bursa Malaysia Group.

	Bursa Malaysia has invested and put in place tools and mechanisms to enhance the cyber resilience capabilities to anticipate, withstand, contain and rapidly recover from a cyber incident with the objective of limiting the escalating risks that cyber threats pose to Bursa Malaysia and its stakeholders. Amongst the controls that have been put in place are: (a) Vulnerability assessment and penetration test conducted to identify security vulnerabilities in system and appropriate remedial actions taken to address any weaknesses. In addition, Vulnerability Assessment Tool was refreshed to enable detection of potential vulnerabilities automatically and safeguard the systems from potential threats from those vulnerabilities. (b) Firewall and network intrusion prevention system in place to monitor, detect and mitigate malicious activity or suspicious traffic on the network. Security Components was put in place to refresh Firewalls, LAN Access Control Servers with the latest technologies and capabilities to ensure the network is safe from any intrusion of unauthorised access that connects to Bursa Malaysia network. (c) Re-designed staff Internet access to use a separate Network Firewall and Broadband line to minimise Internet bandwidth contention during peak utilisation for business application / traffic and to prevent cyber-attack. (d) Anti-virus software implemented for all desktops, servers, email exchange and gateway. (e) Information leakage control to avoid unauthorised access and data leakage. (f) Independent consultant to conduct Social Engineering Test to evaluate staff awareness in identifying scam (e.g. email phishing and physical tailgating test), granting access permission to restricted areas and sharing of sensitive information. (g) External professional to conduct source code review for in-house developed software to provide comprehensive assurance that Bursa Malaysia's application is secured in terms of application flaw. (h) Established Bursa Malaysia Computer Emergency Response Team ("BMCERT"). The BMCERT is aimed to elevate the operational improvement and instil a culture of cyber risk awareness on incident response to cyber threats.

	(i) Participated in the Capital Market Cyber Drill Simulation ("CMCDS") organised by the SC in October 2018. Bursa Malaysia was identified as a key participant to participate in the CMCDS with the aim to strengthen the market preparedness in responding and recovering from potential cyber incidents. It is crucial for Bursa Malaysia to remain vigilant and maintain visibility on cyber preparedness and resilience. Bursa Malaysia was categorised in the top 25 percentiles among 38 organisations that participated in 2018 CMCDS. The tools and mechanisms are reviewed and assessed to observe with the Guidance on Cyber Resilience for Financial Market Infrastructures issued by IOSCO as well as to comply with the Guidelines on Management of Cyber Risk issued by the SC. In relation to BMDC having a business continuity plan, the following are put in place:- **(a) Business Continuity Plan ("BCP")** The overall approach is geared towards ensuring adequate back-up arrangements for all critical office facilities and system components; online data replication from the main site to the DR site and data back-ups to ensure no data loss; and, developing business continuity procedures and testing them periodically. The failure of the critical system components is mitigated with clustering and redundant systems/infrastructure facilities at the Bursa Malaysia's main site, hence minimising the needs to failover to the Bursa Malaysia's DR site/systems. The systems at Bursa Malaysia's DR site are capable of running all functionalities that are currently available at the main site. **(b) Alternate Site and Backup Systems and Office Facilities** The Group's back-up systems and office facilities are housed in its own DR site which is away from the main site. These two different sites are provisioned from different power sub-stations and different telecom exchanges for electricity supply and telecommunication services respectively, to mitigate the risk of concurrent impact to both sites. The DR site is having adequate capacity and as part of the annual BCP testing has been found to be capable of handling the operations for a sustained period of time.

	(c) BCP and Testing The Group has a comprehensive group wide BCP plan. The BCP is tested annually with the participation of all stakeholders with target RTOs of 2 to 4 hours. The BCP test includes participation of the BMDC participants, they are required to connect to Bursa Malaysia's DR site and verify their ability to conduct their usual services and the integrity of their data. Appropriate recalibration of the BCP are made and if required these are re-tested. Procedures in the BCP for mitigating business interruption risks are tested at least once a year. These procedures are also subjected to external audits by the SC and the appointed external auditor of Bursa Malaysia. **(d) BMDC's Workflow and Recovery Time Window** BMDC's derivatives (post trade functions) settlement is on T+1 market day and the business (production) hours are from 7:00 a.m. to 8:30 p.m. Monday to Friday. The EOD batch processes for the DCS are from 8:30 p.m. to 9:30 p.m. After the EOD processes, the settlement details files are generated and sent via the DCS and e-mail to the participants and BMDC's internal team whereas the settlement instructions will be sent via RENTAS for RM currency settlement and fax/e-mail for USD currency settlement (by 8:00 a.m.) to the settlement banks for execution by 8:45 a.m. on the settlement day. In the event of DCS disruption before or during the EOD processes and after DCS recovery, BMDC could extend the production hours and delay the EOD processes accordingly so long as the EOD processes can be completed by 8:00 a.m. on the settlement day. This gives BMDC a window of 10.5 hours or more for recovery, resumption and execution of EOD processes where applicable. For DCS disruption after the EOD processes, the settlement process on the settlement day is not affected as DCS automatically sends the settlement details files to the participants and BMDC via email during the EOD process. **(e) RTO and BCP Test Results** Both the derivatives trading and clearing & settlement systems are classified as critical systems with RTO of 4 hours and 2 hours respectively. For year 2018, the derivatives trading and clearing & settlement systems were brought up at the CME's DR site and Bursa Malaysia's main site well within the pre-set RTOs of 4 hours and 2 hours respectively, for a start of day failure scenario BCP test. This BCP test was successfully simulated.

	(f) Market Participant's DR Site, BCP and Testing In addressing the risks of key participants may pose to its operations, Bursa Malaysia requires all market participants to maintain robust BCP and this is ascertained as part of the ongoing supervision activities which includes onsite audits of the DR sites of the participants. The participants are also required to participate in the BCP tests of Bursa Malaysia. As part of the BCP testing Bursa Malaysia's treasury processing and cash settlement unit which deals with the settlement bank is also ensured of its ability to function from the DR site. The ability to provide online banking facilities is one of the criteria used to select settlement banks and banks that provide liquidity support.
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.***	
Summary narrative	Criteria and requirements for participation, which are objective and risk-based, are set out in the BMDC Rules available at the Bursa Malaysia website. BMDC has two types of membership: (a) General Clearing Participant ("GCP") are essentially brokers which are also TP of BMD; and (b) Direct Clearing Participant ("DCP") i.e. proprietary traders which are body corporates and registered as Associate Participant ("AP") of BMD. General eligibility criteria for GCP include the following: (a) requisite financial and business standing and repute; (b) minimum shareholders' funds of at least RM 10 million or higher requirements if the GCP is also a PO of BMS or an Investment Bank; (c) sufficient resources and adequate systems for the proper performance of the business of Clearing; (d) meets the minimum financial requirements; (e) holds a valid Capital Markets Services Licence for carrying on the business of Clearing. General eligibility criteria for DCP include the following: (a) requisite financial and business standing and repute;

	(b) shareholders' funds of at least RM 2 million; (c) sufficient resources and adequate systems for the proper performance of the business of Clearing; (d) meets the minimum financial requirements. The minimum financial requirements of GCP and DCP is stipulated under Rules 215 and 216 of the BMDC Rules. In addition to the BMD requirement for a TP to have a minimum RM 5 million paid up capital, the BMDC Rules require GCP to maintain at all times an adjusted net capital of RM 500,000 or 10% of aggregate margins required; whichever is the higher. This financial requirement is not applicable to GCP who is also a Participating Organisation ("PO") of BMS or an Investment Bank as it will already be subjected to higher degree of financial requirement under BMS or the Central Bank Rules. A DCP is required to maintain at all times a net tangible asset of not less than RM 5 million or a corporate guarantee of not less than RM 5 million. Applicant for GCP is imposed with an annual fee of RM 6,000 and registration fee of RM 50,000 whilst an applicant for DCP is imposed with a registration fee of RM 10,000. Applicant for GCP of BMDC is required to undergo a readiness audit before being allowed admission. Bursa Malaysia monitors ongoing compliance of participants on a group basis. There is a department at Bursa Malaysia that handles this function. The participants of the exchanges, the clearing houses and the depository are all subject to the same process. Bursa Malaysia uses a combination of off-site supervision based on periodic submissions and on-site inspections to fulfil its regulatory role. On-site inspection frequency is guided by a risk-based profile of each participant. Each GCP is subject to on-site inspections periodically depending on the risk profile, with those with a higher risk profile are audited more frequently. The scope of the onsite and offsite supervision activities covers verifying participants' ability to meet payment obligations, risk management policies, management supervision, compliance to rules, internal audit and security of IT systems. DCPs are not subjected to these supervision as they are clearing their own trades only. The compliance head of a GCP is required to report any violation of the Rules to the Clearing House.

	If the GCP is also a PO, the PO will be required to report its capital adequacy ratio on a periodic basis; liquidity position on a weekly basis; statement about their compliance to the segregation requirement and, profit and loss statement. These reporting requirements are stipulated in the directives for the POs / TPs which are publicly available at the Bursa Malaysia website.
Principle 19: Tiered participation arrangements ***An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.***	
Summary narrative	Not applicable.
Principle 20: FMI links ***An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link related risks.***	
Summary narrative	The only link BMDC has with other FMIs is with BM Depo for depositing equity collaterals collected from the CPs. BMDC and BM Depo are institutions that have been created in accordance to the provisions in the CMSA and SICDA respectively. These entities are also supervised and overseen by the SC. In addition, BMDC and BM Depo are subject to the group governance model.
Principle 21: Efficiency and effectiveness ***An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.***	
Summary narrative	With the joint venture between Bursa Malaysia and CME, BMDC benefited from the knowledge transfer from CME in particular of operational arrangements, products, clearing and settlement procedures and technology platform. Hence, BMDC is efficient and effective in meeting the requirement of its participants and the markets it serves. The objectives of BMDC are aligned with Bursa Malaysia's overall visions: (a) To process, execute and complete all clearing and settlement activities in a timely manner, in accordance with the prescribed procedures, rules, guidelines and directives; (b) To provide an efficient, reliable and stable clearing and settlement infrastructure; and (c) To ensure adequate risk management measures, including monitoring participant's ability to meet their settlement obligations, effective handling of default and adequacy of financial resources.

<table>
<tr><td></td><td>BMDC reviews its efficiency and effectiveness by conducting periodic benchmarking, in particular to ensure appropriateness of the margin levels on monthly basis. The result is taken into consideration by BMDC for the determination of an appropriate margin level for the respective products. In addition, BMDC has identified and established the following targets for key operational indicators to ensure BMDC continue to observe and achieve an efficient and effective level in discharging its duties:
(a) Time taken to complete trade processing;
(b) Adherence to cut-off times; and
(c) System availability.

On top of that, BMDC obtains feedback from the participants through consultation. BMDC also performs a post implementation review for any new initiatives, which involves consultation with the participants that is the requirement imposed by the SC for any new approved initiatives/projects. The review report is then tabled to the management for their acknowledgement.</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td>Summary narrative</td><td>BMDC has interfaces with the GLOBEX trading platform for receiving the contracts that are to be novated, the participants for sending their respective settlement positions and screen based interface for communicating margin calls and other such information. All the interfaces are built on industry standard protocol like TCP/IP, however the message formats are proprietary.</td></tr>
<tr><td colspan="2">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 and fees and other material costs they incur by participant in the FMI. All relevant rules and key procedures should be publicly disclosed.</td></tr>
<tr><td>Summary narrative</td><td>All new participants are provided with requisite training to ensure they have the requisite knowledge of the systems, processes and rules. The ongoing supervision activities are used to identify if there are any gaps in the knowledge relating to process and rules. Based on discussions with the participant a suitable course of action is determined, which could</td></tr>
</table>

	include additional training. If need be, training will be provided to participants on areas that the participants feel they require refresher. The operational procedures are readily accessible by the participants of BMDC via eRAPID, a web-based solution to facilitate electronic transmission of circulars containing these operational procedures as well as other notices addressed to the participants. These operational procedures are not publicly available. The participants are also provided with network connectivity file specifications and message specifications for system connectivity and interface requirements. Technical documents on the system processes and designs are sent to participants through circulars. BMDC provides the details of the fees to the participants. The participants interviewed expressed no concerns with respect to transparency related to the fees. BMDC have clear and comprehensive rules to govern its participants, complemented by operational procedures. The rule-making process is a robust one, involving benchmarking, analysis, review and consultation to ensure that BMDC arrives at appropriate rules. Specifically, the rules are clearly formulated and in compliance with the relevant laws and regulations based on a multi-tiered internal process which includes: (a) Consideration of the regulatory objectives to be achieved, concerns to be addressed and the implications of the proposed rule amendments; (b) Benchmarking the proposed rule amendments to those of other more developed markets and which has a similar framework so that the rules are on par with international standards, where applicable; (c) Review of the proposed rule amendments by qualified staff, senior management and chief regulatory officer prior to review or approval by a management regulatory committee; (d) Consultation with the relevant stakeholders including market participants and at times the public to ensure that the rules are clear, practical and are aligned with stakeholders' expectations;

	(e) For major rule amendments, approval is also by a board regulatory committee, comprising of Bursa Malaysia's board members who are professionals and market experts from the various related fields of the capital market; and (f) Approval of the SC for all rule amendments except for those that are specifically exempted from the SC's approval, for example amendments that are editorial or consequential in nature pursuant to changes made to other relevant rules approved by the SC. The BMDC Rules are approved by the SC except for rule changes that have been specifically exempted from the SC's approval, for example amendments that are consequential to law changes. BMDC also has a process to seek external legal opinions where necessary, to ensure the enforceability of the relevant rule or contract. The BMDC Rules are publicly available at the Bursa Malaysia website: www.bursamalaysia.com. In addition, all CPs are notified of any amendments to the rules via circulars. Bursa Malaysia currently discloses quantitative data on performance of BMDC, financial condition and resources to the SC on a quarterly basis.
Principle 24: Disclosure of market data by trade repositories ***A trade repository should provide timely and accurate data to relevant authorities and the public in line with their respective needs.***	
Summary narrative	Not applicable.

V. List of Publicly Available Resources

Relevant Information Pertaining to BMDC can be found at:
https://www.bursamalaysia.com/trade/our_products_services/derivatives/company_profile

Links to documents referenced within this Disclosure Framework are below:

Capital Markets and Services Act 2007
https://www.sc.com.my/regulation/acts/capital-markets-and-services-act-2007

Circulars
https://www.bursamalaysia.com/trade/trading_resources/derivatives/circulars/

Corporate governance model
https://www.bursamalaysia.com/about_bursa/about_us/corporate_governance/governance_model

Derivatives Clearing & Settlement System
https://www.bursamalaysia.com/reference/insights/derivatives/derivatives_clearing/derivatives_clearing_settlement_system

Derivatives: Rules of Bursa Malaysia Derivatives
https://www.bursamalaysia.com/regulation/derivatives/rules_of_bursa_malaysia_derivatives

Derivatives: Rules of Bursa Malaysia Derivatives Clearing
https://www.bursamalaysia.com/regulation/derivatives/rules_of_bursa_malaysia_derivatives_clearing

Exchange and clearing fees
https://www.bursamalaysia.com/trade/post_trade/derivatives_clearing_and_settlement/exchange_and_clearing_fees

FCPO physical delivery
https://www.bursamalaysia.com/trade/post_trade/derivatives_clearing_and_settlement/fcpo_physical_delivery

Financial safeguards and risk management https://www.bursamalaysia.com/trade/post_trade/derivatives_clearing_and_settlement/financial_safeguards_and_risk_management

Information on membership application
https://www.bursamalaysia.com/trade/trading_resources/brokers_for_derivatives/becoming_a_participant_corporate

Market statistics
https://www.bursamalaysia.com/market_information/market_statistic/derivatives

Products information
https://www.bursamalaysia.com/trade/market/derivatives_market

Other related links
https://www.bursamalaysia.com/trade/trading_resources/derivatives/trading_procedures