



大连商品交易所
DALIAN COMMODITY EXCHANGE



Principles for Financial Market Infrastructures Disclosure

May 2021

Table of Contents

I. Executive Summary.....	1
II. Summary of Major Changes Since Last Update.....	2
III. General Background on DCE.....	3
A. General description of DCE and the markets it serves.....	3
B. Organizational structure of DCE.....	6
C. Legal and regulatory framework.....	7
D. System design and operations.....	10
IV. Principle-by-principle Narrative Disclosure.....	11
Principle 1: Legal basis.....	11
Principle 2: Governance.....	17
Principle 3: Framework for the comprehensive management of risks.....	27
Principle 4: Credit risk.....	32
Principle 5: Collateral.....	38
Principle 6: Margin.....	42
Principle 7: Liquidity risk.....	47
Principle 8: Settlement finality.....	55
Principle 9: Money settlements.....	57
Principle 10: Physical deliveries.....	61
Principle 12: Exchange-of-value settlement systems.....	63
Principle 13: Participant-default rules and procedures.....	64
Principle 14: Segregation and portability.....	66
Principle 15: General business risk.....	69
Principle 16: Custody and investment risks.....	71
Principle 17: Operational risk.....	73
Principle 18: Access and participation requirements.....	80
Principle 19: Tiered participation arrangements.....	83
Principle 21: Efficiency and effectiveness.....	85
Principle 22: Communication procedures and standards.....	87
Principle 23: Disclosure of rules, key procedures, and market data.....	87
V. Resources Available to Public.....	91

Responding institution:

Dalian Commodity Exchange.

Jurisdiction(s) in which the FMI Operates:

the People' s Republic of China

Authority Regulating, Supervising or Overseeing the FMI:

China Securities Regulatory Commission (CSRC)

The information provided in this disclosure is accurate as of December 31, 2020.

The disclosure can also be found at

<http://www.dce.com.cn/DCE/TradingClearing/Markets/PFMI/index.html>.

For further information, please contact: PFMIResponse@dce.com.cn.

***Disclaimer:** This report is the translation based on the Chinese version and may be used for reference only. In cases there is any discrepancy between the report and the original Chinese version, the original Chinese version shall prevail. Dalian Commodity Exchange may change or update this English translation without any prior notice and shall accept no responsibility or liability for damage or loss caused by any error, inaccuracy, misunderstanding, or change with regard to this English translation.*

I. Executive Summary

Dalian Commodity Exchange("DCE") is a non-profit and self-disciplined futures exchange which is regulated by China Securities Regulatory Commission("CSRC"), China' s statutory regulator for the securities and futures markets, under the *Regulations on Administration of Futures Trading* and the *Measures for Administration of Futures Exchanges*.

As a futures exchange integrating the functions of both trading and clearing, DCE serves as a Central Counterparty ("CCP") to every trade, becoming the buyer to each seller and the seller to each buyer, and carries out the settlement on a net basis to provide centralized performance guarantee for futures trading.

The market participants on DCE include direct and indirect participants. There are two types of direct participants, namely, futures company members and non-futures company members, among whom, futures company members can engage in brokerage business in accordance with laws, and carry out other business including overseas brokerage and futures investment advisory when holding such qualification, but they cannot engage in the proprietary

businesses; non-futures company members can only engage in the proprietary businesses. Due to the different potential risks for different types of members, DCE has set up corresponding legal requirements, financial indicators, business management systems, risk management systems, technical system systems and other thresholds for each type of members. Indirect participants include clients of futures company members, and overseas brokers and their clients. Such participants are not allowed to trade in the market directly. Instead, they are required to entrust domestic futures company members to conduct transactions and settlements.

DCE currently conducts CCP clearing operations only based on Chinese laws, and the operations have a sound, clear, transparent and enforceable legal basis. Regulated by CSRC, DCE conducts businesses in accordance with the *Regulation on the Administration of Futures Trading*, the *Measures for the Administration of Futures Exchanges* and other relevant laws.

In the CCP clearing business, DCE has identified several key risks, which includes legal, credit, liquidity, operational, market, general business and other risks. In order to cope with these risks, DCE has established a multilevel risk management structure including the risk management committee under the board of governors, a risk control committee at the administrative level, and an emergency response team, so as to comprehensively manage the risks brought by market participants, as well as DCE's own operations. By establishing a series of risk management mechanisms and tools such as margin, price limit, position limit and forced position liquidation, DCE achieves effective management of credit risks and liquidity risks. In addition, DCE has set up a comprehensive internal audit system, which is staffed by professional internal auditors, providing important assurance for the effective play of auditing supervision.

This report is a self-assessment conducted by DCE on the CCP clearing services operated by it, in accordance to the requirements of *Principles for financial market infrastructures*("PFMI"). The self-assessment is conducted in the way determined by the *PFMI Disclosure Framework and Assessment Methodology*. The assessment period is until December 31, 2020.

II. Summary of Major Changes Since Last Update

Consistent with guidance under the Disclosures Framework, DCE updates its disclosure framework at least once a year and following material changes to its practices of the environment in which it operates. This version includes the following primary changes since the last version was published on May 31st, 2020.

- Updating Major business statistics collected from clearing services.
- Applying *the Civil Code of the People's Republic of China* (“*The Civil Code*”)¹ as legal basis instead of *the Contract Law, the Guarantee Law and the Property Law of the People's Republic of China*. See Principle 1 and 8 for more details.
- Accepting China government bond as margin. On August 3rd, 2020, DCE began to accept China government bond as margin. See principle 5 for more details.
- Updating the organizational structure. On April 15th, 2020, DCE founded its fourth wholly-owned subsidiary, DCE FinTech Testing Technology Co., Ltd., which is also the first professional testing company in the securities and futures industry. In 2020, DCE also set up the OTC Business Department. For strategic reasons, DCE has dissolved Beijing and Shenzhen offices.
- In response to the impact of COVID-19 pandemic, DCE improved its emergency response mechanism and issued a series of measures. See principle 17 for more details.

III. General Background on DCE

A. General description of DCE and the markets it serves

DCE is a legal person that was set up under the *Regulation on the Administration of Futures Trading* and the *Measures for the Administration of Futures Exchanges*. It does not seek profits and implements self-discipline management on the basis of the bylaws and trading rules. DCE is a member-based futures exchange, and its registered capital is divided into equal shares, which are funded and paid by the members. By the end of 2020, DCE had a total of 160 members, including 149 futures company members and 11 non-futures company members.

DCE provides trading and clearing services for the futures and options products traded on itself. By the end of 2020, there is a total of 20 futures products and 7 options contracts launched on DCE (see Table 1 for details).

Table 1 Listed Products at DCE

Product Series		Products
Futures	Industrial Products	LLDPE, PVC, Coke, Coking Coal, Iron Ore, PP, Ethylene Glycol, Ethenylbenzene, LPG

¹ On May 28, 2020, *the Civil Code* was adopted at the third session of the 13th National People's Congress, which shall come into effect as of January 1, 2021, and *the Contract Law, the Guarantee Law and the Property Law* shall be repealed at the same time.

Agricultural Products	Corn, No. 1 Soybean, No. 2 Soybean, Soybean Meal, Soybean Oil, RBD Palm Olein, Egg, Fiberboard, Blockboard, Corn Starch, Polished Round-grained Rice
Options	Soybean Meal Options, Corn Options, Iron Ore Options, LPG Options, LLDPE Options, PVC Options, PP Options

In 2020, DCE recorded a total trading volume of 2.207 billion lots and a total turnover of RMB 109.20 trillion (single counting). In the same year, DCE ranked 7th among the major derivatives exchanges in the world according to the rankings for the trading volume announced by the Futures Industry Association (FIA).

DCE implements an all-member settlement system. The Exchange only settle for its members; the members settle for their clients and overseas intermediaries that entrust them to trade and settle; the overseas intermediaries settle for their clients. The clearing department set internally at DCE is responsible for exchange and OTC clearing, settlement and accounting; margin, warehouse receipt and collateral management; settlement risk management; depository bank management; making and implementing commission policies, etc.

DCE implements the margin mechanism. Margin refers to the funds, standard warehouse receipts with stable value and high liquidity, or securities including China government bond that can be used for settlement and performance guarantee. Margins include the clearing deposits and the trading margins. The clearing deposits refer to the funds deposited by a member in advance in the settlement account dedicated by DCE for the purpose of the transaction settlement, and are the deposits not occupied by the contracts. The minimum balance of the clearing deposit shall be prescribed and announced by DCE, and the member shall make the payment with his or her own funds in full in RMB. The trading margins refer to the funds that a member deposits in the settlement account dedicated by DCE to ensure the performance of contracts, and are the deposits that have been occupied by the contracts. When the transaction is closed, DCE will charge trading margins as a certain percentage of the value of positions held by the buyer and seller or in other ways provided by the exchange.

According to business requirements, DCE opens dedicated settlement accounts in different currencies at different depository banks for depositing the members' margins and related funds. The members shall open dedicated margin accounts in the currencies required by the businesses at designated

depository banks for depositing the margins and related funds, and specifically, the dedicated margin accounts opened at the branches of the depository banks designated by DCE are the members' dedicated fund accounts. The transfer and settlement of the funds for the futures business between DCE and the members are handled through DCE's dedicated settlement account and the members' dedicated fund accounts. By the end of 2020, there were 16 DCE designated depository banks in total, including *Bank of Communications* ("BCM"), *Industrial and Commercial Bank Of China* ("ICBC"), *China Construction Bank* ("CCB"), *Agricultural Bank of China* ("ABC"), *Bank of China* ("BOC"), *Shanghai Pudong Development Bank* ("SPD Bank"), *Industrial Bank* ("CIB"), *China Minsheng Bank* ("CMBC"), *China Everbright Bank* ("CEB"), *China Citic Bank* ("CITICIB"), *China Merchants Bank* ("CMB"), *Ping An Bank* ("PABC"), *China Guangfa Bank* ("CGB"), *Agricultural Development Bank of China* ("ADBC"), *HSBC Bank (China) Company Limited* and *Postal Savings Bank of China* ("PSBC").

DCE implements the mark-to-market system. At the end of each trading day, DCE settles profit and loss, trading margins, trading fees and other fees for all the contracts according to the settlement prices on the day, and the net amounts of the receivables and payables will be transferred at a time, with the members' clearing deposits increased or decreased accordingly. After the settlement is completed, if a member's clearing deposit is lower than the minimum balance, the settlement result shall be regarded as the notice on replenishing margin issued by DCE to the member. The member should increase the clearing deposit to the minimum balance before the market opening on the next trading day. With the clearing deposit not fully replenished, if the balance is greater than zero and lower than the minimum balance, it is forbidden to open a new position; if the clearing deposit balance is less than zero, DCE will impose forced position liquidation on the member according to relevant rules.

DCE implements the risk reserve system. The risk reserves refer to the funds set up by DCE to provide financial guarantees for the normal operation of the futures market and to cover the losses caused by unforeseeable risks. The sources of the risk reserves include the management fees on the basis of 20% of the trading fees collected by DCE from members, and other incomes that conform to the state's fiscal policies. The risk reserve is accounted for separately, is deposited in the dedicated account, and shall not be used for other purposes except to compensate for the risk losses.

All the commodity futures contracts currently traded on DCE are subject to physical delivery when they expire. The physical delivery may be carried out through the standard warehouse receipt delivery or take the form of the

exchange of futures for physicals (the "EFP"), the bill of lading delivery, the rolling delivery, the daily selective delivery, the one-off delivery and other processes prescribed by DCE.

B. Organizational structure of DCE

DCE has established a corporate governance structure including the members' meeting, the board of governors, the board of supervisors and the executive management.

1. Members' Meeting

As the organ of authority of DCE, the members' meeting is composed of all the members. The members' meeting exercises the powers of reviewing and approving DCE's bylaws, trading rules and draft amendments to them; voting to elect or replacing member governors and member supervisors; reviewing and approving the financial budget of DCE; reviewing the use of risk reserve, etc. The meeting is convened by the board of governors and held once a year.

2. Board of Governors and Special Committees under it

The board of governors is the permanent body of the members' meeting and is responsible to the members' meeting. The board of governors consists of 17 governors, including 13 members and 4 non-members. The board of governors exercises the functions and powers such as convening and reporting to the members' meeting; drafting DCE's bylaws, trading rules and draft amendments to them; reviewing financial budget and report proposed by CEO; deliberating on and approving the detailed rules and measures formulated on the basis of the bylaws and trading rules. There are 10 special committees set up under the board of governors, including those for strategic consulting, risk management, trading, settlement, agricultural products, industrial products, member qualification, mediation and disciplinary action, finance, and information technology applications, which are aimed at providing support for the board of governors in its work.

3. Board of Supervisors

As the internal supervisory body of DCE, the Board of Supervisors reports to the members' meeting. It exercises the functions and powers including reviewing DCE's financial position; supervising the execution of duties of DCE's governors and senior officials. The Board of Supervisors shall consist of no less than 5 supervisors, including the Member supervisor(s), the full-time supervisor(s) and the employee supervisors. The supervisors may sit in on members' meeting and CEO executive meeting, inquire about or advise on the resolutions.

4. Executive Management

The executive management is the decision execution body of DCE and is responsible for the organization and implementation of the decisions made by DCE. The executive management includes one CEO, and several vice presidents and other senior management personnel. The CEO and vice presidents are appointed and dismissed by CSRC, and other senior management personnel are appointed in accordance with relevant rules.

DCE has set up 19 internal departments, including the Party committee office (the office of the board of governors, and the labor union office), the executive office (investment and asset management office), the supervisory board office (audit department), the technology planning office, the trading department, the agricultural products department, the industrial products department, the clearing department, the technology operations and maintenance center, the media relations and information department, the international cooperation department (Hong Kong, Macao and Taiwan affairs office), the industry development department, the market development/member services department, the legal and compliance department, the surveillance department, the finance department, the human resource department (organization department of the Party committee), the discipline inspection office and the OTC business department, 2 regional head offices in Shanghai and Singapore respectively, and 4 subsidiaries including DCE Research Institute, Futures IT Co., Ltd., DCE FinTech Testing Co., Ltd. and Admin. Services Co., Ltd.

C. Legal and regulatory framework

DCE currently conducts the CCP clearing businesses only under Chinese laws, and the businesses have a sound, clear, transparent and enforceable legal basis. The laws and regulations include *the Civil Code*, the *Regulations on the Administration of Futures Trading*, the *Measures for the Administration of Futures Exchange* the *Measures for the Supervision and Administration of Futures Companies*, etc.

With the regulation and administration of CSRC, DCE organizes futures trading in accordance with the principles of openness, fairness, impartiality, integrity and trustworthiness, and provides members with trading venues and facilities, as well as various related services such as settlement, delivery and information release.

According to the *Regulations on the Administration of Futures Trading* issued by the State Council and the *Measures for the Administration of Futures Exchanges* issued by CSRC, DCE has established a whole set of rules and regulations system for trading operations and market management, and specified rules for trading, settlement, delivery, management of members, risk control, warehouse receipt management, handling of violations and other

factors in the futures market.

Market Access: The *Regulation on the Administration of Futures Trading*, the *Measures for the Supervision and Administration of Futures Companies*, the *Bylaws of DCE* and the *Measures for Membership Management of Dalian Commodity Exchange* are normative documents on market access, and the main contents include the criteria and the approval procedure for the establishment of a futures company, the requirements and qualifications for applying for the membership of DCE, the rights and obligations of the members, and the market participants, etc.

Contracts: The rules governing futures contracts and option contracts are mainly the *Regulation on the Administration of Futures Trading*, the *Measures for the Administration of Futures Exchanges*, the *Bylaws of the Dalian Commodity Exchange* and the *Trading Rules of the Dalian Commodity Exchange*, which provide for the responsibilities that DCE should take in the process of designing, launching, revising and terminating the contracts, as well as the corresponding approval procedures.

Trading: According to relevant laws, regulations and policies of China and the *Bylaws of the Dalian Commodity Exchange*, DCE has formulated the *Trading Rules of Dalian Commodity Exchange* to regulate all transactions and trading activities on DCE such as trading, settlement, delivery and risk control. Those that must abide by the trading rules include DCE, the members, the traders, the designated delivery warehouses, the Designated Depository Banks, other participants in the futures market, and the personnel of related institutions.

According to the *Trading Rules of Dalian Commodity Exchange*, DCE has further formulated the *Measures for Trading Management of Dalian Commodity Exchange* to clearly define the members' seats, the trading floor, remote trading, prices, trading codes, information disclosure and other factors. DCE, the members, the overseas brokers and the clients shall abide by the detailed rules.

Settlement: According to relevant laws, regulations and policies of China and the *Trading Rules of Dalian Commodity Exchange*, DCE has formulated the *Measures for Clearing Management of Dalian Commodity Exchange* to regulate the settlement activities on DCE. In the settlement, DCE implements the margin system, the mark-to-market system and the risk reserve system. DCE and its staff, the members and their staff, the overseas brokers, the clients and the DCE Designated Depository Banks shall abide by the detailed rules.

Delivery: According to relevant laws, regulations and policies of China and the *Trading Rules of Dalian Commodity Exchange*, DCE has formulated the *Measures for Delivery Management of Dalian Commodity Exchange*, the *Measures for the Designated Delivery Warehouses Management of Dalian Commodity Exchange*, the *Measures for Standard Warehouse Receipt Management of Dalian Commodity Exchange* and the detailed rules for specific futures products to regulate the delivery business of DCE. The participants in the delivery business such as DCE, the members, the overseas brokers, the clients, the designated delivery warehouses, the designated vehicle board delivery sites, and the designated quality inspection agencies shall abide by the rules mentioned above.

Risks and Responsibilities: According to relevant laws, regulations and policies of China and the *Trading Rules of Dalian Commodity Exchange*, DCE has formulated the *Measures for Risk Management of Dalian Commodity Exchange*. In the risk management, DCE implements the margin mechanism, the price limit mechanism, the position limit mechanism, the trading limit mechanism, the large position report mechanism, the forced position liquidation mechanism, and the risk warning mechanism. DCE, the members, the overseas brokers and the clients shall abide by the Measures.

Self-discipline Regulation and Enforcement: According to relevant laws, regulations and policies of China and the *Bylaws of DCE* and the *Trading Rules of Dalian Commodity Exchange*, DCE has formulated the *Measures against Rule Violations of Dalian Commodity Exchange*. The violations refer to the behaviors of the members, the overseas brokers, the market makers, the clients, the designated delivery warehouses, the Designated Depository Banks, the designated quality inspection agencies, the information service providers, other participants in the futures market, and their staff, in violation of the bylaws, trading rules and other related rules of DCE. DCE shall investigate, identify and punish rule violations based on facts and the principles of fairness and integrity. Any rule violation that constitutes a criminal offense shall be turned over by DCE to a judicial authority for criminal prosecution in accordance with applicable laws. In case a member, an overseas broker, a market maker, a client, a designated delivery warehouse, or a futures market participant has been punished by CSRC in respect of a certain rule violation, DCE may exempt or mitigate the punishment in respect thereof when it determines the punishment.

Emergency Response: According to the *Trading Rules of Dalian Commodity Exchange*, when all or part of the business such as trading, clearing, delivery, option exercise and contractual performance cannot be conducted normally due to force majeure, technical failure, unexpected event or other applicable

reasons, the Exchange shall handle the situations as the abnormalities and may take necessary emergency measures pursuant to its business rules.

When up (down) limit price appears continuously in the same direction with respect to a certain contract, or the market risks have significantly increased otherwise, the Exchange may take such actions as adjusting the range of the price limits, adjusting the trading margins, setting or adjusting the trading limits, adjusting the trading fees, forced position liquidation, mandatory tear-up and other measures, so as to mitigate the trading risks. If the risks have not been resolved after taking corresponding measures, the Exchange shall handle the situations as the abnormalities and may take necessary emergency measures pursuant to its business rules.

D. System design and operations

The systems involved in the settlement business of DCE mainly include the settlement business management system, the electronic deposit and withdrawal system, the electronic warehouse receipt management system and capital risk assessment system etc., with the specific functions as follows:

1. Settlement Business Management System. The system performs daily settlement, and settles the profits and losses, trading margins, trading fees, taxes and other expenses of all contracts on the basis of the settlement prices on the day, transfers the net amounts of the receivables and payables at a time, and accordingly increases or decreases the members' clearing deposits; the system provides members with relevant data and information about transactions, positions, margins, risks and settlement parameters every day. The system also supports the management of core businesses such as the settlement for physical delivery and the usage of foreign exchange and securities as margins, so as to guarantee the normal operation of the settlement business.

2. Electronic Deposit and Withdrawal System. The system is an electronic fund settlement platform that connects the three sides of DCE, members and banks. The system realizes the electronic functions in the whole process of applying for, examining and approving and tracking the settlement of futures funds, as well as the real-time tracking of flow of funds, characterized by safety, efficiency and convenience, and has effectively reduced the operating costs for the members, DCE and banks, and improved the efficiency of capital operation in the market and DCE's capacity for monitoring and controlling the fund risks.

3. Electronic Warehouse Receipt Management System. The system is a comprehensive platform for management of standard warehouse receipts

linking up DCE, members, delivery warehouses and quality inspection agencies. It realizes the electronic management of the business processes such as notice of intent to deliver, the registration, transfer, utilization as margin and cancellation of the standard warehouse receipts, and application for inspection and inspection of goods, having improved delivery efficiency and ensured the security of warehouse receipts; the system is conducive to DCE mastering relevant information about clients, members and delivery warehouses, timely discovering abnormal conditions during the delivery process or potential risks, and ensuring the smooth operation of the delivery business.

4. Capital Risk Assessment System. The system monitors members' rights and interests, profits and losses and potential financial pressures in a timely manner, supports various calculating models such as historical price probability, exponential weighted moving average (EWMA), and historical simulation of value at risk (VaR). The system has enhanced DCE' s capacity for managing the risks for the members' funds through the dynamic assessment of the risks for the members and the funds in the whole market during and after the trading hours.

IV. Principle-by-principle 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

Key consideration 1: The legal basis should provide a high degree of certainty for each material aspect of an FMI' s activities in all relevant jurisdictions.

DCE currently conducts CCP clearing business only within the territory of the People's Republic of China, and the domestic legal basis supports each substantive activity of DCE as a CCP. The legal basis includes: the basic laws such as *the Civil Code*; the departmental regulations such as the *Regulation on the Administration of Futures Trading*, the *Measures for the Administration of Futures Exchanges* and the *Measures for the Supervision and Administration of Futures Companies*; the judicial interpretations such as the *Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Futures Dispute Cases*; the bylaws, the trading rules, the detailed rules, and other self-discipline rules formulated by DCE.

As a CCP, DCE conducts highly legally defined business activities which include novation, netting, final settlement, collateral arrangement (including margin) and default processing.

The legal basis for the **novation** is the principle of freedom of contract embodied in Article 5 of *the Civil Code* which stipulates that “the parties to civil legal relations shall conduct civil activities under the principle of free will, and create, modify, or terminate civil legal relations according to their own wills” and the system of general acceptance of credits and debts. The principle and the system support DCE in intervening as CCP between the participants concluding the transaction of the contract, and becoming the buyer to each seller and the seller to each buyer. The CCP status of DCE is also reflected in Article 10 of the *Regulation on the Administration of Futures Trading*, the supporting interpretations of the State Council, and Article 15 of the *Interim Measures for the Administration of Overseas Traders and Overseas Brokers Engaging in the Trading of Specified Futures Products in China*. In addition, Article 6 of the *Measures for Clearing Management of Dalian Commodity Exchange* stipulates that “the Exchange, as a central counterparty, shall conduct centralized clearing with respect to the futures trading, and be responsible for the margin management, the risk reserves management and the prevention of the clearing risks with respect to the futures trading. The term ‘*central counterparty*’ means a legal person who, upon the conclusion of a futures transaction, interposes itself between the counterparties to the futures transaction, becoming the buyer to every seller and the seller to every buyer, undertakes the clearing on a netting basis, and to provide centralized performance guarantee for such futures trading.”

The legal basis for the **netting** is the offsetting system in the Book of Contracts of *the Civil Code*. Paragraph 1 of Article 568 of *the Civil Code* stipulates: “Where the parties owe obligations to each other, and the type and nature of the subject matter of such obligations are the same, any party may set off its own obligation against the due obligation of the other party, unless such set-off is not allowed by the nature of the obligations, as agreed upon by the parties, or according to the laws and regulations.” Article 569 of *the Civil Code* stipulates: “Where the parties owe obligations to each other, and the type and nature of such obligations are different, the obligations may also be set off upon consensus between the parties after consultation.” Article 33 of the *Regulation on the Administration of Futures Trading* stipulates that “the futures exchange shall adopt the mark-to-market system” . Article 39 of the *Measures for Clearing Management of Dalian Commodity Exchange* stipulates: “The Exchange implements mark-to-market mechanism. Mark-to-market means that by the end of the daily trading, the Exchange shall settle the profits

and losses, trading margins, commissions and other costs for all the contracts based on the settlement price of the then-current day and allocate the net amounts of the accounts receivable and payable so as to appropriately increase or decrease the Member's clearing deposits.”

The legal basis for **offsetting** is the provisions in the Book Contracts of *the Civil Code*. It is stipulated in Paragraph 1 of Article 568 that “Where the parties mutually owe obligations to each other, and the subject matter of the obligations are of the same kind and quality, any party may offset his obligation against the due obligation of the other party, unless the obligation cannot be offset by virtue of the nature of the obligations, or in accordance with the agreements by the parties or the provisions of law.” Article 569 stipulates: “Where the parties mutually owe obligations to each other and the subject matter of the obligations are not of the same kind or quality, the obligations may also be offset upon agreement by the parties through consultation.” Article 33 of the *Regulation on the Administration of Futures Trading* stipulates: “The futures exchange shall adopt the mark-to-market system.” Article 39 of *Measures for Clearing Management of Dalian Commodity Exchange* stipulates: “The Exchange implements mark-to-market mechanism. Mark-to-market means that by the end of the daily trading, the Exchange shall settle the profits and losses, trading margins, commissions and other costs for all the contracts based on the settlement price of the then-current day and allocate the net amounts of the accounts receivable and payable so as to appropriately increase or decrease the Member's clearing deposits.”

The legal basis for **settlement finality** is in Article 33 of the *Regulation on the Administration of Futures Trading*, which stipulates “The futures exchange shall timely inform its members of the trading results on the current day. A futures company shall settle its transactions according to the settlement result of the futures exchange and shall timely inform the client of the settlement result in a form as agreed to between it and the client.” and in Article 68 of the *Measures for the Supervision and Administration of Futures Companies*, which stipulates “A client shall raise an objection, if any, to the settlement report in writing within the time limit specified in the futures brokerage contract, and the futures company concerned shall verify the relevant facts within the specified time. A client's failure to raise an objection within the prescribed time limit shall be deemed a confirmation of the contents of the settlement report.” Article 27 of the *Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Futures Dispute Cases* states: “The confirmation made by a client in respect of the transaction settlement result of the current day shall be regarded as the confirmation of all the position and transaction settlement results prior to that day, and the client shall accept by itself the transaction results thus generated.” Article 94 of the *Measures for Clearing Management*

of Dalian Commodity Exchange stipulates: “Any transactions concluded in accordance with the rules of the Exchange shall have legal effect, and shall not be invalidated, changed or revoked due to any defects in the capacity of the trader, untrue declaration of intention or disputes over the ownership of the sources of the margins. Any losses arising from such transactions shall be borne by the trader.” Article 95 stipulates that: “the Exchange organizes futures trading. Any concluded trading orders, closed futures transaction positions, margins received, and assets transferred or pledged as margins, matched standard warehouse receipts and other transactions, clearing and delivery or legal attributes of property, and measures taken for breach of contract shall not be revoked or invalidated due to any entry of any Members into bankruptcy proceedings.”

The legal basis for the **collateral arrangement** is the provisions of the Book of Real Rights of *the Civil Code* on the security real right system and the provisions of the *Regulation on the Administration of Futures Trading* on the margin. Article 386 of *the Civil Code* stipulates: “The security interest holder shall, in accordance with the law, have the priority of compensation made from the property posted as security if the debtor fails to pay the due debt or falls under any circumstance where security interest shall be exercised as agreed upon by the parties, except as otherwise provided for by any law.” Article 440 stipulates: “The following rights that the debtor or a third party is entitled to dispose of may be pledged: (1) Bills of exchange, promissory notes and checks; (2) Bonds and certificates of deposit; (3) Warehouse receipts and bills of lading; (4) Transferable fund shares and stock rights; (5) Transferable property rights among intellectual property rights, such as the right to the exclusive use of registered trademarks, patents and copyrights; (6) Existing and anticipated accounts receivable; (7) Other property rights which may be pledged as provided for by laws and administrative regulations.” Article 81 of the *Regulation on the Administration of Futures Trading* stipulates: “Margin refers to the funds paid or standard warehouse receipts, treasury bonds and other negotiable securities with stable values and high liquidity submitted by futures traders, which are used for settlement and performance guarantee purposes.”

The legal basis for the **rapid disposal of margin assets** is the relevant provisions of the Book of Real Rights of *the Civil Code* on the priority right of the security rights holder for claim and the realization of security real rights. Paragraph 1 of Article 425 stipulates: “Where, for securing the performance of an obligation, the debtor or a third party pledges the movable thereof to the creditor for possession, if the debtor fails to pay the due debt or falls under any circumstance where pledge shall be exercised as agreed upon by the parties, the creditor shall have the priority of compensation made from such a

movable.” Article 453 stipulates: “The lienor and the debtor shall agree on the term for the performance of the obligation after lien is exercised on the property. In the absence of such an agreement or if such an agreement is ambiguous, the lienor shall allow the debtor to perform the obligation within the term of 60 days or longer, except that the movable is fresh, perishable or hard to keep. If the debtor fails to perform the obligation within the prescribed time limit, the lienor may agree upon with the debtor to have the property under lien converted into money, or may have the priority of compensation made from the auction or sell-off of the property. Where the property under lien is converted into money or sold off, its market price shall be taken as the reference. ” Article 77 of the *Trading Rules of Dalian Commodity Exchange* stipulates: “In case a Member cannot perform the contract, the Exchange shall have the right to take any of the following protective actions: ...(2) implementing forced position liquidation as prescribed, and using the margins released after the liquidation to perform the contract and make indemnification; (3) disposing of the assets that are submitted as margins and converting them into cash to perform the contract and make indemnification; ... ”

The legal basis for the **segregation** of margin assets is the provisions of the *Regulation on the Administration of Futures Trading* on the requirements for the ownership and storage of margins. Article 28 stipulates: "The margin, which a futures company collects from its clients, shall be separated from the futures company's own money and be deposited in a special account. The margin, which a futures company collects from its clients, belongs to the clients. Such margin shall be strictly prohibited from being used for any other purpose except for the circumstances prescribed in the Regulation."

The legal basis for **default management** is the provisions of *the Civil Code* and the *Regulation on the Administration of Futures Trading* on liability for breach of contract. Article 577 of *the Civil Code* stipulates: “Where a party fails to perform its obligations under a contract, or its performance fails to satisfy the terms of the contract, it shall continue to perform its obligations, take remedial measures, pay damages, or be otherwise held liable for breach of contract.” Article 36 of the *Regulation on the Administration of Futures Trading* stipulates: “Where a member breaches a contract in futures trading, the futures exchange shall first use the member's margin to bear the liability for breach of contract; where a client breaches a contract in futures trading, the futures company shall first use the client's margin to bear the liability for breach of contract.”

Key consideration 2: An FMI should have rules, procedures and contracts that are clear, understandable, and consistent with relevant laws and regulations.

In accordance with relevant laws and regulations, DCE uses the understandable, clear and concise statements in formulating or modifying business rules, procedures and contracts. When releasing or modifying the rules, DCE usually carries out the relevant market training through webinars, market forums and other forms, explaining the relevant background, how to understand the articles, and the issues that market participants need to pay attention to after the rules are implemented.

Before the business rules are officially released to the market, the Legal and Compliance Department of DCE is responsible for reviewing the legality of the rules, procedures and contracts, and providing review opinions. In case of difficulties or major problems, DCE also consults legal experts and external lawyers. As of now, no inconsistencies have been found between rules, procedures and contracts and related laws and regulations.

The business rules, procedures and contracts of DCE shall be approved by CSRC or reported to CSRC beforehand. Article 13 of the Regulation on the Administration of Futures Trading stipulates: “To handle the following affairs, a futures exchange shall be subject to the approval of the futures regulatory institution of the State Council: (1) The formulation of or modification to its Articles of association or trading rules; (2) The listing, suspension, cancellation or resumption of any type of transaction; (3) Other affairs as prescribed by the futures regulatory institution of the State Council. To approve the listing of new transaction type in a futures exchange, the futures regulatory institution of the State Council shall consult the opinions of the relevant department of the State Council.” Article 94 of the Measures for the Administration of Futures Exchanges stipulates: “The futures exchange that develops or amends the detailed rules for the implementation of the trading rules shall report to the CSRC in advance.”

Up to now, there is no inconsistency between DCE’ s rules, procedures and contracts with related laws and regulations.

Key consideration 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants’ customers, in a clear and understandable way.

DCE clarifies the legal basis of its activities to regulators, members, overseas brokers and their clients in a clear and understandable way.

For CSRC, DCE submits the request or the report of draft business rules to CSRC while applying for approval or reporting beforehand, which shall include

the background and reasons for the formulation or revision of the business rules, the comparisons with the related businesses of other exchanges, the legality, the solicitation of opinions in the market, and other contents.

For members and clients, DCE releases the latest updates such as contracts, trading rules and detailed implementation rules on the DCE website, and clarifies the legal basis of its activities in the forms such as Q&A on business, business training, and forums.

Key consideration 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.

The business rules, procedures and contracts of DCE are formulated according to Chinese laws and are enforceable within the jurisdiction of the People's Republic of China.

The business rules, procedures and contracts of DCE are formulated in strict accordance with the laws, administrative regulations and departmental rules such as the Civil Code, the Regulation on the Administration of Futures Trading and the Measures for the Administration of Futures Exchanges. The formulation or revision of all business rules have been approved by CSRC or have been reported to CSRC.

The laws and regulations mentioned above ensure that all the rules, procedures and contracts of DCE will not be declared invalid or reversed or have the implementation terminated, thus achieving high certainty. At present, there is no court in China ruling that the rules, procedures or actions of DCE are unenforceable.

Key consideration 5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.

DCE currently conducts futures trading and other related businesses only according to Chinese laws, and the businesses have a sound, clear, transparent and enforceable legal basis.

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.

Key consideration 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.

DCE aims to “build an open, diversified world-class derivatives exchange with complete derivatives instruments, various products, safe and efficient operation and well-performed functions, and become a globally important commodity pricing center and risk management center.”

DCE does not attempt to maximize its profits at any costs. It is subject to the supervision and management of CSRC. In the process of daily operation and key decision-making, DCE gives top priority to safety and efficiency. It is clearly stipulated in the *Bylaws of DCE* and business rules that efforts must be made to ensure the normal futures trading and protect the legal rights and interests of the participants involved in futures trading, as well as the interests of the general public. To ensure that these objectives can be achieved, DCE follows an order matching system under the principle of price priority and time priority. It also implements a series of mechanisms such as margin management, risk reserves, trading code, position limit, hedging management, arbitrage trading management, abnormal trading management, management of accounts involving actual control relationship, large position report, mark-to-market, price limit, delivery, information disclosure, forced liquidation, risk warning and banning the entry into the market. These mechanisms are designed to enhance the exchange management and market risk control, and fully maintain the principles of establishing a market that is open, fair and just.

Key consideration 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.

According to the *Regulation on the Administration of Futures Trading* and the *Measures for the Administration of Futures Exchanges*, DCE has set up a standardized governance structure, has the accessible governance arrangements, and provides clear and direct responsibilities and accountability framework. The arrangements mentioned above will be made public on the DCE website.

DCE has established a governance structure including the members' meeting, the board of governors, the board of supervisors and the executive management. The responsibilities and obligations of the members' meeting, the board of governors, the board of supervisors and the executive management are clearly defined in the bylaws. Specifically, the members' meeting is the organ of authority of DCE, and is composed of all members, with the functions and powers exercised including: reviewing and passing the bylaws, trading rules and draft amendments; deliberating on and approving the work reports of the board of governors, the board of supervisors and the CEO; approving the financial budget plans and the final reports; deliberating on the use of risk reserves and general risk reserves, etc.

The board of governors is the permanent body of the members' meeting, with the functions and powers exercised including: convening and reporting work to the members' meeting; deliberating on the financial budget plan, final report, and annual work plan proposed by the CEO; drawing up the bylaws, trading rules and draft amendments to be submitted to the members' meeting for adoption; determining the setup and personnel composition of the special committees; reviewing and approving the use plans for risk reserves and general risk reserves; reviewing and approving DCE's development plans and annual work plans proposed by the CEO.

The board of supervisors is the supervisory body of DCE, with the functions and powers excised including: checking the financial affairs of DCE; supervising the behaviors of the governors and senior management personnel in performing their duties.

The executive management is the decision executive body of DCE and is responsible for organizing the implementation of the decisions. The executive management includes the CEO, the vice presidents and other members. The functions and powers exercised by the CEO include: organizing the implementation of the systems and resolutions adopted by the members' meeting and the board of governors; presiding over the day-to-day administrative work; organizing the drafting of relevant detailed rules and measures in accordance with the bylaws and trading rules; drafting the use plans for the reserves for the risks; drafting and implementing the approved external investment plans of DCE, preparing financial budget plans and final reports, and so on.

The members' meeting shall be convened by the board of governors; the members' meeting shall form the meeting minutes for the voting items, which shall be signed by the governors present at the meeting. Within 10 days after the end of the members' meeting, DCE shall submit all the documents of the

meeting to CSRC for filing; within 10 days from the end of the meeting of the board of governors, the board of governors shall submit the resolutions of the meeting and other meeting documents to CSRC.

In accordance with relevant state regulations, DCE will report to CSRC an annual financial report audited by an accounting firm with securities and futures-related business qualifications within 4 months after the end of each year.

Key consideration 3: The roles and responsibilities of an FMI ' s board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall performance and the performance of its individual board members regularly.

The responsibilities and obligations of the members' meeting, the board of governors and the board of supervisors are clearly defined in the *Bylaws of DCE*. Both the members' meeting and the board of supervisors meeting shall form relevant resolutions and meeting minutes, which shall be kept as archives.

The Board of Governors is the permanent organ of the Members' Meeting and is accountable to the Members' Meeting.

The Board of Governors shall exercise the following powers:

- (1)holding the Members' Meeting and report work to the Members' Meeting;
- (2)passing the appointment and dismissal of the Chairman and the vice Chairmen of the Board of Governors which are nominated by CSRC;
- (3)adopting the non-confidence motion against a member of the Board of Governors and submitting the motion to the relevant organ for deliberation and approval;
- (4)drafting the Bylaws, the trading rules of the Exchange and their draft amendments, and submitting to the Members' Meeting for approval;
- (5)deliberating the financial budget proposal and accounting reports proposed by the CEO, and submitting to the Members' Meeting for approval;
- (6)deliberating the solutions of merger, acquisition, division, change of organization form, dissolution and liquidation of the Exchange, and submitting to the Members' Meeting for approval;
- (7)determining the structuring and composition of the special committees;
- (8)determining the admission and withdrawal of the Members, and the overseas special participants, the overseas traders that directly trades on the Exchange and the overseas brokers;
- (9)determining the disciplinary sanctions for any rule violations;
- (10)determining the modification of the name, domicile or business premises of

the Exchange;

(11)deliberating and approving the detailed rules and provisions formulated on the basis of the Bylaws and the trading rules;

(12)deliberating and approving the scheme for using risk reserves;

(13)deliberating and approving the scheme for withdrawing and using general risk reserves;

(14)deliberating and approving the development plan and annual work plan of the Exchange proposed by the CEO;

(15)deliberating and approving the outbound investment plan of the Exchange;

(16)supervising the CEO's implementation of resolutions adopted by the Members' Meeting and the Board of Governors;

(17)supervising the compliance with applicable laws, regulations, rules, policies of the State and the bylaws, rules of the Exchange by the senior executives and other staff of the Exchange;

(18)organizing the auditing of the Exchange's annual financial accounting report and determining the appointment and replacement of the accounting firm; and

(19)other powers prescribed by the Bylaws and granted by the Members' Meeting.

The board of governors has clear forms and procedures for the authority, including convening the meeting of the board at least once every six months; if there are circumstances stipulated in the bylaws, an extraordinary meeting of the board may be convened; the meeting adopts the “one member one vote” system in voting, which is valid only when more than two thirds of the members are present, and its resolution shall be passed when more than half of the members of the board vote in favor; the board of governors meeting shall be attended by the members themselves, and when a member cannot attend the meeting for any reason, he or she shall entrust another member to be present on behalf of them in the written form; the board of governors meeting shall make minutes on the voting at the meeting, which shall be signed by the members and the recorder present at the meeting; within 10 days from the end of the meeting of the board of governors, the board of governors shall submit the resolutions of the meeting and other meeting documents to CSRC.

The Board of Governors may, as it deems necessary, set up special committees of strategy consulting, surveillance, trading, clearing, delivery, membership, disciplinary sanction, mediation, finance, IT applications and otherwise.

The responsibilities of the Strategic Advisory Committee are to provide professional, forward-looking and innovative opinions and suggestions on the

major development strategies of DCE for the board of governors, etc.;

The duties of the **Risk Management Committee** include: establishing and improving the risk management framework for DCE; formulating and revising the contents related to risk management and supervisor administration in the *trading rules, Measures for Risk Management, Measures for Hedging Management, Measures for Arbitrage Trading Management, Measures Against Rule Violations*, and *Measures for the Administration of Abnormal Trading*, etc.; providing opinions and suggestions on the plans for utilizing DCE' s risk reserves and the plans for drawing and utilizing the general risk reserves; and providing the board of governors with opinions and suggestions on research and innovation in risk management and other businesses of DCE, etc.;

The duties of the **Trading Committee** are: formulating and revising the trading rules and detailed trading rules directly related to the trading on DCE, and providing opinions and suggestions for the board of governors, etc.;

The duties of the **Industrial Products and Agricultural Products Committee** include: formulating and revising the rules, detailed rules and measures for development of new products and design of contracts, development of market and cultivation of products, and delivery, and providing opinions and suggestions for the board of governors, etc.;

The duties of the **Clearing Committee** are: formulating and revising the clearing-related contents in the trading rules, the *Measures for Clearing Management* and the *Measures for Administration of Designated Depository Banks*, and providing opinions and suggestions for the board of governors, etc.;

The duties of the **Membership Review Committee** are: formulating and revising the *Measures for Membership Management*, and providing opinions and suggestions for the board of governors, etc.;

The duties of the **Mediation and Disciplinary Action Committee** include: mediating futures disputes between DCE members, the clients, the designated delivery warehouses and other futures market participants in accordance with relevant rules, and providing the board of governors with advice on dealing with the disputes, etc.;

The duties of the **Finance Committee** include: discussing the merger, separation, dissolution and liquidation plans proposed by DCE in accordance with the arrangements of the board of governors, and providing opinions for the

board of governors, etc.;

The duties of the **Information Technology Application Committee** are: providing the board of governors with advice and suggestions on the routine maintenance of the trading system, update and transformation, and safety of information system and network for DCE, and facilitating the safe and stable operation of the trading system.

The board of supervisors shall supervise the performance and the duties of the board of governors and its members. The *Working Measures of Dalian Commodity Exchange for Supervision of the Board of Supervisors over the Performance of Duties of the Board of Governors* stipulates that the means of supervision include convening the meetings of the board of supervisors, sitting in on the meetings of the board of governors, and consulting materials, etc. The supervision procedures include making plans at the beginning of a year, daily supervision, annual summary and evaluation, follow-up tracking and so on. Performance evaluations shall be conducted annually as an evaluation cycle, and form a written report. The board of supervisors shall inform the board of governors of the results of the annual performance evaluation of the board of governors in an appropriate manner, report the results to the members' meeting and submit them to CSRC. According to the *Bylaws of DCE*, when the actions of a member of the board of governors harm the interests of the exchange, the board of supervisors shall require them to make corrections.

Key consideration 4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).

The members of the board of governors are all experienced professionals in the financial industry, with adequate skills, motivation and professional integrity required by the responsibilities.

A Member governor shall be elected through multi-candidate election by the Members' Meeting after nomination by the Board of Governors or joint nomination by no less than one fifth of the Members. Non-Member governors shall be appointed by CSRC. The CEO of DCE shall be an ex officio governor. The DCE member governors nominated by the board of governors or more than one-fifth of the members can represent the interests of a wide range of market participants, and the governors appointed by CSRC are for the purpose of the more extensive public interests. Before nominating the member governors, DCE will conduct sufficient background checks on the candidates to ensure that each governor has rich industry experience, and can correctly

grasp the development direction of DCE so as to improve the quality of decision-making.

The Board of Governors is composed of 17 governors consisting of 13 Member governors and 4 non-Member governors. Each term of the Board of Governors shall be 3 years.

DCE announces the list of the members of the board of governors on its website.

Key consideration 5: The roles and responsibilities of management should be clearly specified. An FMI ' s management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.

The executive management is the decision executive body of DCE and is responsible for organizing the implementation of the decisions. According to the *Measures for the Administration of Futures Exchanges* and the *Bylaws of DCE*, DCE shall have one chief executive officer and several vice presidents. The CEO is the legal representative of DCE, as well as a governor naturally.

The functions and powers that the CEO can exercise are: (1) organizing the implementation of the systems and resolutions adopted by the members' meeting and the board of governors; (2) presiding over the day-to-day administrative work of DCE; (3) organizing the drafting of relevant detailed rules and measures in accordance with the bylaws and trading rules; (4) drafting the plans for the use of the risk reserves; (5) drafting the plans for drawing and using the general risk reserves; (6) drafting and implementing the approved development plans for DCE and the annual work plans; (7) drafting and implementing the approved plans for DCE's external investment; (8) drafting the financial budget plans and final reports of DCE; (9) drafting DCE' s plans for merger, split, change of the organization form, dissolution and liquidation; (10) drafting DCE' s plans for changing the name, domicile or place of business; (11) determining the plan for the setting of the departments, and appointing and dismissing staff members; (12) determining the salaries and rewards and punishments for the employees of DCE; and (13) other functions and powers delegated by the bylaws or the board of governors. DCE has set up the CEO executive meeting system, which shall be attended by the CEO, the vice presidents and other senior executives, so as to make decisions on important matters in the daily operation and management of DCE.

The *Bylaws of DCE* stipulates that the members' meeting has the power to review and approve the work reports of the board of governors, the board of

supervisors and the CEO, as well as the financial budget plans and final reports of DCE; the board of governors has the power to deliberate on the financial budget plans and final reports made by the CEO, and submit them to the members' meeting for approval; the members' meeting has the right to review and approve the development plans and annual work plans of DCE proposed by the CEO.

The *Measures for the Administration of Futures Exchanges* stipulates that the CEO and vice presidents shall be appointed and removed by CSRC, and other senior management personnel shall be appointed in accordance with relevant rules.

The performance evaluation of the executive management shall be conducted by the board of supervisors in an evaluation cycle of one year. The "Working Measures of Dalian Commodity Exchange for Supervision of the Board of Supervisors over the Performance of Duties of the Executive Management" stipulates that the supervision modes include convening the meeting of the board of supervisors, sitting in on the CEO's executive meeting, and accessing materials, etc. The supervision procedures include making plans at the beginning of the year, daily supervision, annual summary and evaluation, follow-up tracking and so on. The board of supervisors shall report the results of the annual performance evaluation of the executive management to the board of governors and the members' meeting in an appropriate manner, and submit them to CSRC, while providing the advice on work based on the evaluation results. According to the *Bylaws of DCE*, when the behavior of a senior executive of DCE damages the interests of DCE, the board of supervisors may require them to correct it. The CSRC may also assess the performance of management through annual financial reports and quarterly and annual work reports submitted by DCE.

Key consideration 6: The board should establish a clear, documented risk management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should ensure that the risk management and internal control functions have sufficient authority, independence, resources, and access to the board.

DCE has established an internal risk management mechanism with the board of governors, executive management and various departments involved, and specified requirements, responsibilities, and accountability and decision-making mechanisms for risk management and internal control.

The risk management committee is the deliberative body under the board of

governors. The responsibilities of the risk management committee are described in Key Consideration 3. The risk management committee may provide opinions and suggestions directly to the board of governors to ensure that the decisions on risk control are made under the authority of the board of governors. The committee convenes working meetings as required and submits an annual work report to the board of governors each year to report on the work in the year. The risk management committee has a clear and independent process for reporting to the board of governors.

According to the different types of risks, the following departments will perform their respective responsibilities for risk management: the clearing department is responsible for settlement in trading and delivery, and prevention and management of risks of clearing business; the agricultural products department and the industrial products department are responsible for preventing and defusing relevant risks of delivery business respectively; the surveillance department is taking charge of real-time monitoring over the market transactions, developing and organizing the implementation of the measures for preventing, dealing with and defusing the risks, and managing the accounts of actually controlling relationship and the program trading; the technology operations and maintenance center is responsible for the integration of DCE's information systems, and the operation, maintenance and security management of the application system. The adoption and applicability of the risk management model shall be fully demonstrated and tested by the surveillance, clearing, trading, and technical departments, and the adoption or evaluation results shall be approved by the board of governors.

The Exchange shall implement a system for handling abnormalities. Under the executive management there are work safety and emergency response leading and working group, make overall plan for work safety management, deal with risks arising from crises and emergencies. According to the emergency response plans of DCE, the *Bylaws of DCE*, the relevant department shall first report to the official in charge after a risk occurs, the official in charge shall report to the emergency management leading group of DCE, and the leading group shall make a decision collectively. The Board of Governors or the CEO may, in accordance with the relevant business rules, identify any abnormalities and decide to take emergency measures. DCE shall provide the relevant departments with the necessary human, material and financial resources.

In order to improve the compliance management, DCE has established a relatively complete internal audit system with independent and professional internal auditors appointed, which is responsible for organizing internal audit supervision, and providing an important guarantee for the effective play of

audit supervision.

Key consideration 7: The board should ensure that the FMI' s design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.

According to the *Regulation on the Administration of Futures Trading*, the exchange does not aim at making profits and it conducts self-discipline management in accordance with its Articles of association.

The DCE member governors are elected by the members' meeting and directly represent the interests of the market participants; the non-DCE-member governors are appointed by CSRC to ensure the protection of the public interests. The governors have the right to vote in the deliberations and decision-making of the board of governors, and can fully express opinions and participate directly in decision-making. The special committees under the board of governors are composed of senior executives from member institutions, designated delivery warehouses or designated depository banks, or the individuals working at relevant industry associations, law, accounting, IT and other areas. The members of the committees can provide opinions and suggestions for the board of governors and influence the board's decision-making by attending the meetings of the special committees or sitting in on the meetings of the board of governors. The board of governors has the right to review and approve DCE' s development plans and annual work plans proposed by the CEO, and to review and approve the detailed rules and measures made in accordance with the bylaws and trading rules. The members' meeting has the right to review and approve DCE' s bylaws and trading rules and their draft amendments, and to review and approve DCE' s financial budget plans and final reports.

DCE listens to the members' opinions every year through research visits, questionnaires, and meetings of members and other means. The convening of the meetings of the board of governors, the resolutions reached and other factors will be reported to the regulatory authorities in a timely manner, and major decisions will be disclosed to the public on the DCE website.

Principle 3: Framework for the comprehensive management of risks

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

Key consideration 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.

The risks borne by the activities of DCE include legal risks (see Principle 1), credit risks (see Principle 4), liquidity risks (see Principle 7), general business risks (see Principle 15), and operational risks (see Principle 17).

In order to identify, measure, monitor and manage the risks mentioned above, DCE has made the following arrangements:

At the level of the board of governors, the risk management committee is set up to provide the board of governors with opinions and suggestions on the issues such as the establishment and improvement of the risk management framework.

At the level of the executive management, the risk management team has been set up is responsible for coordinating the comprehensive risk management of DCE.

The risk management of DCE has been delegated to business departments, mainly including the surveillance department, the clearing department and the products departments. Specifically, the surveillance department, which is mainly responsible for the trading risks at DCE, manages risks by setting the margin rates, position limits, price limits and other rules, and it also takes the measures such as forced liquidation to defuse risk when necessary. The clearing department manages credit risks and liquidity risks. It strictly controls the members' margins through the mark-to-market system, which conducts real-time monitoring of members exposures, and timely makes margin calls. The clearing department also ensures that the members' collateral adequacy to guarantee that the collateral can be realized in a timely manner without affecting settlement. At the settlement every day, DCE summarizes settlement risk exposures through the settlement business management system, and assesses its credit risk exposures by summarizing the funds and positions of the members and clients through the capital risk assessment system. The products departments ensure the prevention of the risks in the delivery process by monitoring the quantity and quality of deliverables on the market, and predicting the futures positions entering the delivery month, so as to ensure safe and smooth implementation of the delivery. At the same time, the

products departments shall also administrate the delivery warehouses to avoid the risks caused by lack of qualification or improper storage of goods at a delivery warehouse.

The evaluation of policies, procedures and system effectiveness for the risk management of DCE mainly depends on the results of the test in practice: the departments making the risk management policies regularly evaluates the practical effects of the risk management policies, and assesses and tests whether the policies can cover the risks; the members shall give feedback on the effectiveness of risk management policies to DCE, and DCE will also actively seek advice and suggestions from the members; the CSRC will evaluate the effectiveness of DCE' s risk management policies, procedures and systems, and provide guiding opinions on the revision of the policies.

DCE risk management framework are subject to regular (normal) and casual reviews. Specifically, the casual review occurs when there is a major change in the market condition of certain product, as the original risk management framework cannot meet the actual requirements, which needs to be updated.

Key consideration 2: An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.

DCE provides necessary information for the market participants and their clients to manage and contain the risks they may bring to DCE by issuing business guides, business rules, and various risk management policies and other means.

DCE has divided its members into futures company members and non-futures company members, and set the access standards such as financial indicators, reputation, systems, and personnel, etc. In order to standardize the business activities of the members, DCE has formulated the *Measures for Membership Management of Dalian Commodity Exchange*, which has been publicly disclosed on the DCE website.

Each year, DCE conducts sample or comprehensive inspections of the members' compliance with DCE's business rules. DCE has the right to require rectification within a time limit if a member has been caught in the following situations: low-level financial management, long-term loss, poor business performance or a clear decline in liquidity, major problems found in the annual review. If the member fails to complete rectification within the time limit, DCE has the right to suspend its trading of futures and options or cancel its membership with the approval by the board of governors.

DCE encourages members and their clients to effectively manage and control their risks by taking various measures, such as excellent member selection, member training and business exams.

Key consideration 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.

The risk resources identified by DCE mainly include members, depository banks, and delivery warehouses.

The risks posed by members are mainly credit risks and liquidity risks. In order to strictly control credit risks and prevent the members from defaulting, DCE monitors and measures the daily credit risks of members by implementing the margin system and the mark-to-market system. DCE also controls such risks from the source through strict membership review, including registered capital, relevant licenses and the practitioners' qualifications, etc.;

The risks brought by the depository banks mainly include liquidity risks and capital security risks. DCE has formulated the *Measures for Designated Depository Banks Management of Dalian Commodity Exchange*, which monitors and measures the risks in terms of the net assets, the number of branches, the capital adequacy ratio, relevant business requirements, technical requirements and emergency plans, etc. of the depository banks. DCE conducts an annual inspection of the qualification of the depository banks, checks the margin depository businesses on an irregular basis as needed, and continuously monitors and manages the risks;

The risks posed by the delivery warehouses are mainly the delivery risks. DCE has formulated the *Measures for the Designated Delivery Warehouses Management of Dalian Commodity Exchange* to administrate the warehouses, management and measures the potential delivery risks. DCE implements an annual review system for delivery warehouses. Each year, DCE conducts an annual inspection and appraisal of the work of the designated delivery warehouses, and adjusts the delivery volumes and delivery limits of the delivery warehouses according to the results of the review and evaluation.

DCE evaluates the effectiveness of risk management tools through practices and simulation results. Through the practice test, each process is evaluated to examine whether the stable operation can be ensured in the processes, within which the series of risk management tools are used. DCE also performs stress

testing and situational testing to demonstrate whether these risk management tools can successfully response to these risks by simulating different scenarios and extremes.

Key consideration 4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.

DCE conducts systematic assessment of various scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern, and has developed corresponding contingency plans.

Article 87 of the *Measures for the Administration of Futures Exchange* stipulates: “ Where any of the following circumstances occurs during the futures trading, the futures exchange may announce the abnormal situation and take emergent measures to resolve the risk:

(1)The trading can't go on normally due to causes not attributed to the futures exchange such as earthquake, flood, fire and other forces majeure or computer system failure;

(2)The member encounters settlement or delivery crisis which is having or will have a considerable impact on the market;

(3) The risks have not been eliminated yet in either case as prescribed in Article 85 of these Measures even after the corresponding measures have been taken; and

(4) Other circumstances as provided for in the trading rules of the futures exchange and the detailed rules thereof.

The futures exchange must report to the CSRC before it announces the abnormal situation and decides to take emergent measures.”

Article 88 of the *Measures for the Administration of Futures Exchange* stipulates: “After the futures exchange announces an abnormal situation and decides to suspend the trading, the time period for suspension shall not exceed 3 trading days unless the CSRC approves the enlargement of the time period.”

DCE has set up a production safety and emergency response leading group, which is responsible for dealing with the risks caused by crises and emergencies. Its duties include deciding when to activate and terminate an

extremely serious or serious emergency response plan, and organizing the efforts in dealing with the risks, etc. The DCE has also formulated emergency response plan for different contingencies of the futures market and the exchange itself, which clearly defines the procedures for effective internal communication and external notification, including the requirements for duties and functions based on the organization structure such as the time, contents, measures and routes for the notification. In the clearing business, in order to deal with the default of the members, DCE may use the financial resources such as membership fees, risk reserves and general risk reserves to apportion and make up for the losses.

According to Article 16 of the *Bylaws of DCE*, the exchange shall terminate in one of the following circumstances: dissolution as decided by the Members' Meeting; merger or division of the Exchange; or closure as decided by CSRC. According to the *Measures for the Administration of Futures Exchanges*, if an exchange terminates, a liquidation group shall be established to carry out the liquidation. The liquidation plan formulated by the liquidation group shall be reported to CSRC beforehand.

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.

Summary Narrative

Key consideration 1: An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.

DCE has a comprehensive and sound management framework to manage

participants' credit risk exposures, as well as the credit risks arising from the payment, clearing and settlement processes, and the framework includes: the *Trading Rules of Dalian Commodity Exchange*, the *Measures for Trading Management of Dalian Commodity Exchange*, the *Measures for Clearing Management of Dalian Commodity Exchange*, the *Measures for Delivery Management of Dalian Commodity Exchange*, and the *Measures for Risk Management of Dalian Commodity Exchange*, etc.

DCE implements a hierarchical responsibility system to deal with the credit risks of the participants. According to the system, DCE is responsible for preventing the risks of the members, the members are responsible for preventing the risks of their clients and overseas brokers, and overseas brokers shall prevent the risks of their clients. DCE's implementation of the margin system and the mark-to-market system can effectively prevent the current and potential risks of its members and clients. DCE also manages the credit risks of depository banks and delivery warehouses through the mechanisms such as access threshold, daily supervision, and annual review.

DCE reviews the risk management framework mentioned above annually or when new products are launched or there are significant changes in the market.

Key consideration 2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.

DCE accesses the potential credit risk posed by each entity, such as the insufficient clearing deposit of the members caused by sharp price fluctuations; the default risk due to the failure of the members caused by poor management; the credit risks arising from the bankruptcy or failure of banks; and the loss of delivery goods because of poor warehouses management.

To monitor the identified credit risks, DCE uses the following tools:

- (1) The pre-transaction order-by-order risk control measure. DCE checks whether the clearing deposit on the member side is sufficient before the transaction, and ensures that no transaction can be completed until the margin of the member for each transaction meets the standard;
- (2) The margin system;
- (3) The mark-to-market system;
- (4) The forced position liquidation system. The member whose clearing deposit is insufficient must replenish it to the minimum balance before the market opening on the next trading day. With the replenishment not conducted, if the clearing deposit balance is greater than zero and lower than the minimum

balance, the member will be banned from opening new positions; if the clearing deposit balance is less than zero, DCE will impose forced position liquidation on the member according to relevant rules.

(5) The annual review system for the banks;

(6) The annual review system for the warehouses.

When measuring risks, DCE will consider the situations from various perspectives such as product, contract, members and clients, to measure and evaluate potential credit risks by conducting fund calculations multiple times a day and stress tests regularly. DCE carries out assessment at least once a year to test the reliability and effectiveness of the measurement system.

Key consideration 3: A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that would create the largest aggregate credit exposure in the system.

Not applicable.

Key consideration 4: A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. In all cases, a CCP should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount of total financial resources it maintains.

DCE covers the current and potential risk exposures of each participant with

high confidence coefficient with margins, risk reserves, general risk reserves and other financial resources.

Typically, margins can cover the current and potential risk exposures of participants at a 99% confidence coefficient level. DCE can adjust the trading margin rate of each contract according to the market conditions, and collect at least 5% of the contract value as margins. In extreme market conditions, risk reserves, general risk reserves, and even DCE's own funds can be used to defuse risks.

The risk reserves are set up by DCE to provide financial guarantees for the normal operation of the futures market and to cover the losses caused by the unforeseeable risks. DCE draws the risk reserves from the management fees at a rate of 20% of the trading commission income collected from the members, and the risk reserves can be directly used to cover the risk exposure of the participants. At present, DCE maintains a high level of risk reserves, whose size has reached the upper limit. The general risk reserves are drawn by DCE from the after-tax profit and can be used to cover major risk losses arising from transactions, delivery, settlement, and technology, etc. In addition to the resources mentioned above, DCE can use other financial resources, which includes self-owned funds, to cover credit risks as well.

DCE regularly conducts stress tests in extreme but plausible market conditions. So it could maintain sufficient financial resources to cover the exposure of at least two clearing members that would create the largest aggregate credit exposure in the system.

The policy on the total volume of financial resources shall be formulated by the board of governors, evaluated by the clearing department and implemented by the finance department. The withdrawal and employment of risk reserves and general risk reserves are subject to the approval by the board of governors. DCE also assesses the adequacy of risk reserves and general risk reserves each year.

DCE is only systemically important in China's mainland and does not involve the liquidation of the financial instruments that are characterized by "jump-style default" price changes or that are closely related to potential defaults of participants.

Key consideration 5: A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the

results of its stress tests to appropriate decision makers at the CCP and to use these results to evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be performed at least annually.

On the basis of the 99% confidence coefficient for the trading margin covering the price fluctuations of the products, DCE regularly conducts stress tests to assess whether they have sufficient financial resources when two participants would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions.

The stress testing of the DCE has clear and definite execution procedures. In daily risk monitoring, the staff of the clearing department will report the results of the stress testing to the department director after the market closing every day, so as to check whether the financial resources meet the liquidity requirements. In the market situation of sudden surge in positions and increased price volatility, DCE will conduct stress testing and analysis of the validity and suitability of the parameters more frequently, and on the basis of the market situation, consider the different possible scenarios such as price limit in the same direction (price fluctuations), continuous price limits, decline in liquidity (changes in market liquidity) and unilateral positions (concentrated positions) that may occur the next day when testing, and the clearing department will report the testing results to the executive management in a timely manner.

If the margins of default members and risk reserves cannot cover the default losses under pressure, DCE will put into use the general risk reserves and other financial resources in accordance with the relevant procedures.

The back-testing mode is adopted in verification of the risk management model, which means that with each measurement result compared with the actual situation, the existing model will not be changed when the results are similar, and the mode and parameters of the risk management model will be adjusted when there are big differences. DCE also assesses the adequacy of

general risk reserves each year.

Key consideration 6: In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.

In conducting stress tests, DCE ensures that there are sufficient financial resources to cover the stress scenarios under extreme market conditions by setting possible extreme stress scenarios and participants default scenarios. The stress scenarios include two participants with the largest payment obligation simultaneously default when multiple contracts reach the price limits consecutively in the same direction.

DCE assesses the extreme stress scenarios caused by price fluctuation and other market factors by historical price probability method, Exponentially Weighted Moving Average method, VaR method, etc. The most commonly used is the historical price probability method, in which the credit risks for the next trading day are estimated based on the circumstances of the peak historic price volatilities of each contract in the market recently. The method mainly considers the historical price fluctuations in the market, pays great attention to the peak historical price volatilities, and adjusts the parameters on the basis of changes in other market factors, the multipliers of the defaults in different time spans, and the forward-looking pressure scenarios under various possible extreme market conditions.

Key consideration 7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.

DCE has established explicit rules and procedures that address fully any credit losses it may face. These rules and procedures should address how potentially uncovered credit losses would be allocated.

According to Article 92 of the *Measures for Clearing Management of Dalian Commodity Exchange*, when a member fails to perform the obligations and responsibilities for a contract, DCE has the right to take following measures:

- (1) to utilize the Member's clearing deposits;
- (2) to suspend opening for trading;
- (3) to conduct forced liquidation pursuant to the applicable rules until the margins released after the liquidation are sufficient to perform the contractual obligations or liabilities; and
- (4) to convert the Assets as Margins into cash, so as to use the proceeds from such conversion to perform the contractual obligations or liabilities.

Article 93 stipulates that if the member still owes funds after the measures mentioned above, DCE will perform the obligations and responsibilities for the contract in the following procedures:

- (1) to revoke the Member's membership and use its membership fee for compensation;
- (2) to utilize the risk reserves to provide compensation for the contractual performance;
- (3) to utilize the Exchange's own assets to provide compensation for the contractual performance; and after the Exchange performs the applicable obligations or responsibilities under the applicable contracts, it may claim against the relevant Members through legal procedures.

DCE draws the risk reserves at a rate of 20% of the trading fee incomes. CSRC and the Ministry of Finance of China can decide when to expand the scale of the risk reserves based on the size of the futures exchange's business, development plans and potential risks. After the risk reserves are used, DCE can continue to draw the risk reserves as supplementary financial resources at a rate of 20% of the trading fee incomes.

In addition to its own assets, DCE also signs agreements with the Designated Depository Banks, which stipulates that within the amounts agreed between the two sides, the depository banks may provide financial support for the settlement business of DCE to help defuse the risks.

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.

Summary Narrative

Key consideration 1: An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.

DCE determines the types of assets that can be used as margins based on the criteria of low credit risk, low liquidity risk and low market risk, and currently standard warehouse receipts of products other than egg and No.2 soybean, foreign currency funds (US dollar) and the book-entry China government bond issued in Chinese Mainland by the *Ministry of Finance of the People's Republic of China* are accepted. For details, please refer to Chapter 6 of the *Measures for Clearing Management of Dalian Commodity Exchange*.

In order to ensure the authenticity and validity of the standard warehouse receipts, DCE carries out the management through the electronic warehouse receipt management system, which distinguishes the quality standards, the ownership and the circulation status of the warehouse receipts. The client can authorize the member to submit the application for using the warehouse receipt as the margin through the system, and the warehouse receipt serving as margin takes effect in real time, with the status of the warehouse receipt frozen in real time. The member can check the status of the warehouse receipt in real time. The registration of China government bond as collateral is the responsibility of a third-party registration institution, and the deposit and withdrawal are operated through an electronic system.

To further reduce the credit risk and liquidity risk of assets used as margins, Article 83 of the *Measures for Clearing Management of Dalian Commodity Exchange* stipulates that the exchange shall determine the maximum matching amount of the Member's negotiable securities as the margins in accordance with four times (matching multiplier) the Member's actually owned monetary funds in the corresponding internal subsidiary ledger or the internal subsidiary ledger for clearing entrustment of the exchange.

DCE may adjust the benchmark price, discount rate, and limits of the assets used as margins based on market conditions.

Key consideration 2: An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.

According to the *Measures for Clearing Management of Dalian Commodity Exchange*, the exchange applies risk control mechanisms including daily mark-to-market, haircuts and matching multiplier to ensure that the value of assets used as margins is sufficient to meet the margin requirements.

In case the standard warehouse receipt is taken as the margins, at the time of daily settlement, the Exchange shall calculate its market value on the basis of the benchmark price set as the settlement price of the then-current day of the futures contract in the latest delivery month in respect of the product under such standard warehouse receipt. Before the market close of the then-current day, the market value of the standard warehouse receipt shall be calculated based on the benchmark price set as the settlement price on the previous trading day of the futures contract of the latest delivery month in respect of the product under such standard warehouse receipt.

In case the China government bond is taken as the margins, the benchmark price of the bond shall be the smaller value of the custodian valuation data, and the Exchange shall determine the market value of the bond by utilizing the net price of such benchmark price of the bond on the previous trading day at the time of daily settlement.

Currently, the haircut covers the ranges of the price limits for the futures contract, and basically cover the price fluctuation risks of the standard warehouse receipts.

For the foreign currency funds (US dollars) used as the margins, DCE comprehensively evaluates the fluctuations of the central parity rate of the RMB against USD. After conducting the quantitative model analysis and considering other risk factors, DCE sets the haircut for the US dollar used as the margin at 5%, which basically covers the risks of price fluctuations risk of the currency.

DCE regularly conducts testing and evaluates the effectiveness of the haircut, and considers the appropriateness of the haircut when the market is in a stress situation with asset impairment occurring.

Key consideration 3: In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.

DCE has maintained stable and conservative haircuts since the implementation of the Assets as Margin business, which means that a 20% haircut is implemented for the standard warehouse receipt used as margin, with a 5% haircut for the US dollar used as margin, and a 20% haircut for the China government bond used as margin.

A stable haircut can reduce the occurrences of the procyclical phenomenon,

and especially during periods of market stress, it will not have further downward pressure on asset prices, while the decline in asset prices will result in the requirement for additional collateral; conservative haircuts reflect a viable and prudent attitude toward risk management, as well as the full consideration of the possible depreciation of collateral during market tensions.

DCE irregularly measures the adaptability of the haircuts and make adjustments if necessary. As of now, there has been no change in the haircuts.

Key consideration 4: An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.

The *Measures for Clearing Management of Dalian Commodity Exchange* stipulates a concentration limit for the standard warehouse receipts and China government bond taken as the margins, and specifically, the amount of such assets taken as the margins shall not be more than four times the actual monetary funds.

Every day DCE monitors the proportion of the members' standard warehouse receipts and China government bond used as margins in the total margins and the proportion of the standard warehouse receipts in the volume of the spot market for corresponding product, and continuously assesses the concentration risks. The standard warehouse receipts account for a small proportion of the spot market volume of the corresponding product, and the standard warehouse receipts used as margins do not cause a negative impact on the prices of such assets. In 2020, the monetary funds accounts for more than 94.5% of the total margin on an average daily basis on DCE, and the standard warehouse receipts and China government bond used as margins occupy a relatively small proportion in the total margins.

Key consideration 5: An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.

Not applicable.

Key consideration 6: An FMI should use a collateral management system that is well-designed and operationally flexible.

DCE has a well-designed and operation-flexible collateral management system that can perform business handling, mark-to-market and risk management in a timely manner for the assets used as margins. For example,

in acceptance of the standard warehouse receipts used as margins, the system will freeze the corresponding standard warehouse receipts in real time to avoid reuse; during the trading hours the value of the foreign currency funds can be calculated within the range of normal exchange rate fluctuations or in the extreme market situations; at the end of every trading day, the system can calculate the value of the collateral. If the value of the collateral is insufficient, DCE will issue a notice on adding margins to the member; if the value has a surplus, the members can apply for the withdrawal of the collateral that can be released at the specified time on the client end, and can also check the handling of the collateral at any time.

The DCE personnel operating the collateral management system have relevant skills for risk management, and can identify and judge the risk profiles for the collateral. At the same time, two staff members on the primary and secondary posts carry out the double-checks to ensure the smooth operation of the business.

Principle 6: Margin

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

Summary Narrative

Key consideration 1: A CCP should have a margin system that establishes margin levels commensurate with the risks and particular attributes of each product, portfolio, and market it serves.

According to Article 65 of the *Trading Rules of Dalian Commodity Exchange*, the margins are the funds paid by the futures traders according to the rules, the standard warehouse receipts, China government bond and other negotiable securities with stable value and high liquidity submitted by the futures traders, and are used for settlement and guarantee of performance. The management system and collection modes for the margins are clearly defined in the *Trading Rules of Dalian Commodity Exchange*, the *Measures for Trading Management of Dalian Commodity Exchange* and the *Measures for Risk Management of Dalian Commodity Exchange*.

The margins of DCE include clearing deposit and trading margins. The clearing deposits are the funds deposited by the members in the dedicated settlement account of DCE in advance for the transaction settlement, and they are not occupied by the contracts. The minimum balance of the clearing deposit is determined by DCE. Trading margins are the funds deposited by the members in the dedicated settlement account of DCE to ensure the contract performance, and are the deposits occupied by the contracts. When the buyer

and the seller conclude a transaction, DCE will collect the trading margins at a certain rate of the value of the positions of the contract or in other forms specified by DCE.

The timetable for margin collection and payment is:

- (1) DCE implements the pre-transaction order-by-order risk control measures during the trading period, in which the clients shall pay the margin in advance before each transaction is reached;
- (2) At the settlement on the day, DCE will charge margins for the profits and losses of all contracts on the basis of the settlement price on the day;
- (3) The members are obliged to increase the clearing deposit to the minimum balance before the market opening on the next trading day.

If the member fails to pay the margin in time, the DCE will handle it in accordance with the provisions of the *Measures for Risk Management of Dalian Commodity Exchange* and *Measures Against Rule Violations of Dalian Commodity Exchange*.

The credit risk exposures of the specific products and investment portfolios of DCE are determined by factors such as the volatility, liquidity, size of positions and correlation of futures and spot as well as correlation with relevant products in external markets of the products. The margin level of DCE is closely related to the risks and characteristics of specific products, portfolios and the markets they serve. In setting the margin rate, besides considering common market volatility, the characteristics of specific products will also be taken into account, and different margin rates will be adopted. For arbitrage portfolio investment, DCE offers the favorable condition of reducing or exempting the payment of margins. For example, for the portfolios of calendar spread arbitrage and some portfolios of cross-products arbitrage, the margins will be only collected from one side that shall pay higher margin (also known as high-legged margin).

Key consideration 2: A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.

The price data for the DCE margin model mainly originate from the trading data generated by DCE's own system, and the source is reliable and timely. The price data for the newly launched products are derived from the spot market prices, which are offered by the third parties with high reputation and are characterized by short period and low frequency of utilization. In addition to domestic and international spot market data, additional data sources are also used in determining margin rate, such as the futures data of related products in

the international markets (such as CME market and Malaysian derivatives trading market), the import and export data, the futures market data from related domestic exchanges, and relevant macroeconomic data published by the National Bureau of Statistics.

DCE continuously tracks the price changes from domestic and foreign exchanges and the correlation of related products. From time to time, DCE acquires price data from relevant industrial clients, and pays field visits to origin areas, to ensure the data could be updated timely. In the case that the relevant market price data can't be easily obtained or not reliable, DCE could adopt the pricing model for pricing (for example, it is used in determining the settlement price for a contract with no transaction. See the *Measures for Clearing Management of Dalian Commodity Exchange*).

Key consideration 3: A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the sub portfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilizing, procyclical changes.

The margins of DCE are collected at a certain percentage of the contract value. The margin model is designed to use historical price fluctuations to predict the maximum price volatility that may occur in the future. The current margin level should meet an established confidence level of at least 99% with respect to the estimated distribution of future exposure.

The assumptions of the DCE margin model include that the market is effective, historical prices are valid, and future price fluctuations can be effectively predicted.

The margin model uses the historical simulation (HVaR), and the minimum

trading margin can cover one day' s risk exposures with an established confidence level of at least 99%.

Price fluctuations are estimated based on historical price fluctuations in futures and spot markets over a certain sampling window. The main considerations include: price changes on relevant international exchanges, market fluctuations, the operation of relevant domestic markets, the price fluctuations on DCE market, the operation of the spot market, etc.

In order to reduce the procyclical effect, DCE adopts a model of margin collection at fixed proportions, and the margin rates are not adjusted frequently. At present, DCE only allows cash and certain assets to be used as collateral, thus there is no reverse risk as their value is not affected by the issuer' s credit.

Key consideration 4: A CCP should mark participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.

DCE implements the mark-to-market system by calculating the profits and losses for positions on a daily basis, monitoring the market price changes during the trading hours and the participants' margins in real time, and making margin calls when there is a possible shortage in the margins. According to Article 44 of the *Measures for Clearing Management of Dalian Commodity Exchange*, after the settlement is completed every day, if a member' s clearing deposit is lower than the minimum balance, it will be regarded as the notice on adding margin issued by DCE to the member. The member shall make up the clearing deposit to the minimum balance before the market opening on the next trading day. With the settlement not replenished, if the clearing deposit balance is greater than zero and lower than the minimum balance, the member will be banned from opening new positions; if the clearing deposit balance is less than zero, DCE will impose forced position liquidation on the member according to relevant rules. If the member has a foreign exchange account, DCE may, after the market closing at the second trading session on the next trading day, impose the forced swap on the member' s foreign exchange funds in the dedicated settlement account or the member' s dedicated fund account.

According to Article 29 of the *Measures for Clearing Management of Dalian Commodity Exchange*, DCE has the right to collect all receivables from a member' s dedicated fund account through the depository bank without notifying the member.

Key consideration 5: In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorized to offer cross-margining, they must have appropriate safeguards and harmonized overall risk-management systems.

DCE offers preferential portfolio margins for products that are highly correlated. In reality, DCE collects the high-legged margin in a more conservative way, which is the larger one of the trading margins for the positions on the buying and selling sides.

DCE conducts a daily assessment of the risks for the investment portfolios to ensure their stability. The specific evaluation frequency and management process are consistent with those for the basic products.

Currently DCE has no agreements with other CCPs on offsetting or reducing margins between cleared products.

Key consideration 6: A CCP should analyze and monitor its model performance and overall margin coverage by conducting rigorous daily back testing and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.

DCE conducts back-tests on the margin models and related samples of the basic products and portfolio products every day to verify whether the margin models can cover the risk exposures corresponding to a 99% confidence coefficient. When new products and instruments are launched, the analysis and research on the adaptability of models for the new products and instruments will also be initiated.

DCE adjusts the margin rates in the following situations. First of all, the margin rate will be adjusted when the contract is close to the delivery month or the price limit in the same direction is reached continuously; secondly, the adjustments will be made on the basis of the market conditions such as price volatility, positions in the market, the concentration and market closing on

holidays.

The margin models of DCE based on historical retrospective testing and sensitivity analysis mainly rely on the assumption that history can be repeated. If a model does not perform as expected, measures such as adjusting the samples for the model or changing the data collection cycles will be taken, which will be reported to CSRC for filing.

Key consideration 7: A CCP should regularly review and validate its margin system.

DCE regularly reviews and validates the margin system. For the modification of the margin system, the business departments and the risk control departments shall make the proposals, the legal department shall conduct the compliance review and solicit opinions from the market participants, the executive management shall deliberate and make decisions, and finally the revision will be reported to CSRC for filing. DCE shall disclose the inspection and verification results for the margin models to CSRC. A notice shall be issued to the market on the DCE website and member service system a certain period of time ahead of the official revision.

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.

Summary Narrative

Key consideration 1: An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.

DCE has a robust framework to manage the liquidity risks from its members, the designated depository banks, and the liquidity providing banks.

The potential sources of the liquidity risks identified by DCE include: 1.The member's default leads to insufficient payable funds, and the collateral submitted by the member cannot be quickly realized in disposal; 2.With the default of the Designated Depository Banks, the balance of the funds used by the bank for payment and settlement services is insufficient; 3. The depository

bank serving as a liquidity provider fails to provide credit support for DCE as required by the agreement.

DCE' s liquidity risk management framework mainly includes rules and agreements. The rules include: the *Regulation on the Administration of Futures Trading*, the *Measures for Clearing Management of Dalian Commodity Exchange*, the *Measures for Management of Designated Depository Banks of Dalian Commodity Exchange* etc.; the agreements are the *Agreements on Futures Margin Depository Business* signed by DCE and the depository banks.

The settlement system, trading system, surveillance system, standard warehouse receipt management system, delivery system and capital risk assessment system of DCE are able to identify and monitor the settlement of the members' assets and the flow of funds in depository banks. Through these systems, DCE continuously manages the liquidity risks of the members and the designated depository banks in a timely manner during and after the trading hours every day.

Specifically, in order to guard against the liquidity risks from the members, DCE implements the pre-event risk control management, with the measures including: 1. Adopting the pre-trade order-by-order risk control system, preventing the investors from engaging in overdraft trading; 2. Adopting the RMB funds, the foreign exchange funds, or the standard warehouse receipts and China Government Bonds with stable value and high liquidity as margins; 3. Implementing the price limit system and the position limit system on the contracts to ensure that the default size of participants and their affiliates is limited in extreme cases.

In order to manage the liquidity risks of the designated depository banks, DCE has made strict access and regulatory requirements for the designated depository banks. DCE shall perform the annual review and examination on the qualifications of the Depository Banks pursuant to the Measures, or conduct irregular examination as needed. (see the *Measures for Designated Depository Banks Management of Dalian Commodity Exchange* for details).

Key consideration 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.

DCE uses a variety of operational and analytical tools such as the fund risk assessment system, the settlement system, the risk control system and the trading system to continuously identify measure and monitor its settlement and funding flows.

The fund risk assessment system used by DCE conducts multiple fund risk assessments for the members on a daily basis. In the event of intensified market volatility, the frequency of assessments will be also appropriately increased. The assessments focus on the impact of a member's transaction results on its funds. With specific algorithms, and DCE will predict the potential losses for the member's positions in the future, the member's demand for payment for goods in the future, and the member's financial deficits, payment and performance capacity. When the assessment results show that the member's margins may be insufficient at the settlement on the day, DCE will require the member to reserve funds for the purpose of preventing risks and continue to pay attention to the funds replenishment by the member. The fund risk assessment system supports the assessment and early warning for the members' financing gaps in days in the future under the stress circumstances.

The settlement system monitors the settlement of funds every day. At the day-end settlement, the withdrawal calculation function in the settlement system evaluates the amount of funds that a member can withdraw on the day based on the data for the member such as the amount of margin on the day, the amount assets as margin, and the profit and loss on the day, so as to ensure that after the withdrawal, the member's clearing deposit is not lower than the minimum amount.

In the daily business operation, there are special personnel monitoring the fund balance and the concentration of exposure to each dedicated settlement accounts in the designated depository banks. When the balance of dedicated settlement account at a bank is insufficient or tends to be insufficient, DCE may allot funds from dedicated settlement account at other banks with sufficient liquidity to meet the demand for payment on time. DCE checks the liquidity and concentration of funds in each depository bank.

Based on historical capital data and scenario tests, DCE sets a warning standard for the balance of margin accounts in the designated depository banks. DCE focuses on monitoring the flow of funds in the banks whose accounts balance close to the warning standard.

Key consideration 3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the

largest aggregate payment obligation in extreme but plausible market conditions.

Not applicable.

Key consideration 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

DCE has adequate liquidity resource to cover the demand of clearing and payment services in case of default of the members. Qualifying liquidity resources of DCE include margins (trading margin and clearing deposit), risk reserves and own funds.

Liquidity stress testing is performed daily under predetermined stress scenarios. Those scenarios include, but not be limited to, the default of two members that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.

DCE is only providing CCP services in mainland China, and is not involved with the complex risk circumstances of multiple jurisdictions.

Key consideration 5: For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All such

resources should be available when needed.

Qualifying liquidity resources of DCE include margins (trading margin and clearing deposit), risk reserves and own funds.

DCE has no barriers to obtaining qualifying liquidity resources. First of all, DCE can put into use at any time the trading margins and the settlement margins that are deposited in cash in the designated depository banks. Secondly, DCE's risk reserves and own funds are mainly deposited in cash form in several designated depository banks. The procedures of deposit and use of the risk reserves and own funds is written in the internal measures.

Key consideration 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.

According to the agreements, DCE can obtain supplementary liquidity resources from the designated depository banks. The Agreement on Futures Margin Depository Business signed by DCE and the designated depository banks stipulates: "The depository banks shall provide financial support for the settlement business of DCE within the amounts agreed by the two sides, so as to help DCE defuse the risks." The agreement will still be applicable under extreme market conditions.

DCE will prioritize the use of qualified liquidity resources, instead of using simultaneously or prioritizing the use of additional liquidity resources.

Key consideration 7: An FMI should obtain a high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.

The liquidity providers of DCE are the banks that have signed the *Agreement on Futures Margin Depository Business* with DCE.

According to the requirements in the *Measures for Designated Depository Banks Management of Dalian Commodity Exchange*, DCE selects the designated depository banks for the futures margin depository business, and continuously monitor and assess the risks of those banks. The existing depository banks are all banks with abundant capital and good reputation. They also have the ability to obtain central bank credit, staffed by plenty of professionals, and are able to understand and continuously manage their own liquidity risks in an effective way. DCE signs the *Agreement on Futures Margin Depository Business* with the depository banks so as to define their respective responsibilities and obligations.

The margins paid by the members can be transferred between the futures companies' dedicated margin accounts and the futures companies' fund accounts at DCE. The accounts mentioned above together constitute a closed circle for margins. The margins can only be transferred within the closed circle, characterized by closed operation and monitored by the Futures Market Monitoring Center. The depository banks shall refuse any other institution or individual that intends to freeze, deduct or transfer the funds in DCE' s dedicated settlement account, so as to ensure the safety of the futures margins deposited by DCE.

DCE continuously monitors the concentration of the funds in the banks and, if necessary, implements inter-bank transfers. DCE conducts annual inspections and assessments of the business operation standards of the depository banks to check their risk management and financial conditions.

Key consideration 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its management of liquidity risk.

Not applicable.

Key consideration 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities,

shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.

DCE uses the fund risk assessment platform to conduct stress tests on liquidity resources of currencies used now. And the stress scenarios have considered drastic fluctuations in market prices, changes in the members' positions, the funding flows in the clearing operations, historical market circumstances and possible extreme assumptions, etc. The main purpose for the stress testing is to check the lack of liquidity of the dedicated settlement accounts and the liquidity risks for DCE caused by the gaps in the members' margin funds.

DCE measures a member's liquidity 5 to 8 times a day. DCE predicts the potential losses in positions, the changes in the value of the collateral, and the possible receipt and payment of funds for the members by means of simulated settlement. According to the measurement results, DCE will warn the members against risks and require them to add funds in time. Under the market circumstances such as rapidly changing positions of the contracts and intensified price volatility, DCE will measure the risks more frequently during the trading hours.

The stress testing conducted by DCE can measure the financial conditions of the members and the demand for liquidity payment in one or more trading days in the extreme but possible situations. The stress testing scenarios include, but are not limited to, all contracts of all products hitting the price limit in the same direction continuously, and the members' capital conditions with the price limit reached for the third consecutive time in the next two days. The price and position loss forecasting modes include the historical price probability method, the Exponentially Weighted Moving-Average (EWMA) method, the VAR method, etc., and the factors taken into consideration are the historical price fluctuations in the market, the historical price fluctuation peaks and the market conditions in different time spans.

To verify the parameters of the stress testing model, DCE will back test and compare the results of each measurement with the actual occurrences, and

adjust the model methods and parameters when there are large differences. DCE assigns special personnel to make written records of the daily maintenance of liquidity resources, and record the measurement times in a day, the adequacy of liquidity resources, and the form and results of maintaining total liquidity resources in the presence of risks on a trading day basis. When a special event occurs, in the stress testing, a test report will be written separately to record in detail the test reason, test method and test results, including the causes and reasons for using the model and parameters for the testing.

DCE also establishes a process for reporting test results. For the daily risk measurement, the personnel of the clearing department will report the test results to the department manager after the market closing every day; if an abnormal situation causes tight liquidity, the clearing department will report it to relevant decision makers in time.

Key consideration 10: An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.

DCE has a number of measures to ensure that when a participant defaults, DCE can still settle the payment for debts on time for the day, during the day and for days ahead. According to the *Measures for Clearing Management of Dalian Commodity Exchange* and the *Measures for Risk Management of Dalian Commodity Exchange*, if a member's clearing deposit is negative and the margin is not added in time, DCE has the right to impose forced position liquidation on the member. If the member's margin is still insufficient after the forced liquidation, and the margin cannot be added, DCE will initiate the member default procedures, including realizing the negotiable securities of the member used as margins, and using the realized incomes for performance compensation; cancelling the membership of the member and using the member's membership fee for compensation; putting into use the risk reserve for performance compensation; putting into use DCE's own assets for performance compensation; and claiming compensation from the member through legal procedures. When the risk reserve is used to deal with a risk event, DCE can draw the risk reserve according to relevant rules and procedure. In addition, as DCE and the designated depository banks have

signed the *Agreement on Futures Margin Depository Business*, DCE can obtain liquidity support from the banks.

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.

Summary Narrative

Key consideration 1: An FMI's rules and procedures should clearly define the point at which settlement is final.

The rules of DCE clearly define the time point at which the settlement is final. DCE implements the mark-to-market mechanism. Article 49 of the *Measures for Clearing Management of Dalian Commodity Exchange* stipulates: "After the end of a day's trading, the exchange shall conduct settlement for each member's profits and losses, trading fees, trading margins and other funds. The exchange shall provide the members with the settlement data for the day by issuing or electronically transmitting the settlement documents and other means." Article 52 stipulates: "Member who disagrees with the settlement data shall notify the exchange in writing no later than 30 minutes before the market opening on the next trading day. In special circumstances, the member may notify the exchange in writing within two hours after the market opening on the next trading day. If the member does not object to the settlement data within the specified time, it will be deemed that the member has recognized the correctness of the settlement data." Article 95 also stipulates: "The exchange organizes futures trading, and the legal attributes of the trading, settlement and delivery behaviors or property such as filled trading orders, settled futures trading positions, collected margins, the assets used as margins that have been transferred or pledged and the matched standard warehouse receipts, and the measures taken to deal with the defaults, shall not have the legal attributes of relevant behaviors or property revoked or invalidated due to the member entering the bankruptcy proceedings. If a member enters the bankruptcy proceedings, the exchange may still conduct net settlement for the unsettled contracts of the member on the basis of the trading rules and detailed trading rules for implementation."

The existing legal basis in China can generally ensure the legal certainty of the settlement finality. Based on the relevant laws and regulations and related business rules of DCE such as the *Regulation on the Administration of Futures Trading*, the *Measures for the Supervision and Administration of Futures Companies* and the *Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Futures Dispute Cases*, the rules of DCE for

settlement finality are therefore protected at the legal level.

As noted above, the laws and regulations, departmental regulations and business rules are publicly available on the DCE website.

Key consideration 2: An FMI should complete final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.

DCE implements the mark-to-market system, and the business rules can ensure that the final settlement is completed before the market opening on the next trading day. The DCE Clearing Department conducts the one-time day-end settlement after the market closing on each trading day. As for the application for depositing and withdrawal in RMB and foreign exchange submitted by members, if the application for depositing is submitted by the member before the market closing on each trading day, DCE will complete the handling before the market closing on the same day, and for the application for withdrawal submitted by the members before 15:10 on each trading day, DCE will handle it collectively after 15:10 on the same day following the review by DCE. For the written applications for depositing submitted by the members after the market closing on each trading day, DCE will complete the depositing business for the members before the market opening on the next trading day. Based on the settlement prices on the day, the settlement system settles the profits and losses, trading margins and trading fees and other funds for all contracts, carries out the one-time transfer of the net amounts of receivables and payables, and increases or decreases the member's clearing deposit accordingly. The funds such as profits and losses, fees, payments for goods, taxes and option premiums shall be paid with the capital in RMB currency.

After the settlement is completed, if a member's clearing deposit is lower than the minimum balance, the settlement result shall be regarded as a notice on adding the margin issued by DCE to the member. The member shall make up the RMB funds to the minimum balance for the clearing deposit before the market opening on the next trading day. Otherwise, if the clearing deposit balance is greater than zero and lower than the minimum balance, the member will be banned from opening new positions; if the clearing deposit balance is less than zero, DCE will deal with it according to the relevant rules in the *Measures for Risk Management of Dalian Commodity Exchange*.

In terms of the timeliness and finality of the transfer, DCE requires that the designated depository banks should provide safe, accurate and timely services for depositing and transferring the futures margins, and adjust the time for

handling the business accordingly on the basis of the changes in DCE' s trading and settlement time and the requirements of the futures margin depository business. Regarding the transfer of funds between the accounts within a single bank system, the depository bank shall ensure that the funds are transferred to the fund account designated by DCE in real time upon receipt of DCE' s transfer notes or instructions. With respect to inter-bank fund transfers, the depository bank shall ensure that the funds are transferred out in the quickest manner immediately upon receipt of DCE' s transfer notes or instructions.

Key consideration 3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.

After the final time point for the settlement, for the payment and transfer instructions, etc., DCE generally does not allow exceptions and cancellations, nor will it extend the deadline. The mark-to-market system can guarantee that the final settlement will be completed before the end of the proposed settlement date.

So far, DCE has never experienced any event of postponing the day-end settlement until the next business day. In the event of a delay in the settlement by a member for certain reasons, DCE will deal with the relevant members in accordance with the default procedures; if there is a delay in the settlement caused by itself, DCE will handle the situation on the basis of the emergency plans made in advance. After the last trading day of a contract, all holders of open contracts shall complete the performance in the form of physical delivery.

The information mentioned above has been clearly defined in the business rules and notices and announcements of DCE, and has been disclosed to the public on the DCE website.

Principle 9: Money settlements

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Summary Narrative

Key consideration 1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.

DCE opens the dedicated settlement accounts at the designated depository

banks, and the members open the dedicated margin accounts at the designated depository banks. The members and DCE transfer the funds between the accounts, and settle the funds through the electronic deposit and withdrawal system or the transfer vouchers under special circumstances.

The members of DCE are mainly futures companies, which hardly have the demand for taking the central bank as a depository bank. Therefore, DCE has not opened an account at the central bank. Of all the 16 existing depository banks of DCE, 14 of which are state-owned large-sized commercial banks or nationwide joint-stock commercial banks, 1 is a policy bank and the other 1 is a foreign bank. All the banks mentioned above have abundant capital, good reputation and high-level risk management in the industry, and they are the direct participants in the central bank's real-time High Value Payment System (HVPS) with very low possibility of experiencing credit risks and liquidity risks.

Key consideration 2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.

DCE uses cash to conduct fund settlement with depository banks. The members' margins are also deposited in the accounts at the depository banks in the form of cash, with good liquidity and no barrier to availability.

From multiple perspectives such as registered capital, number of business offices, financial indicators (capital adequacy ratio, liquidity, and asset-liability ratio), corporate governance and risk management capabilities, DCE selects banks with abundant capital and good reputation as depository banks. The *Measures for Designated Depository Banks Management of the Dalian Commodity Exchange* clearly stipulates the conditions and procedures for the financial institutions in the banking sector to apply for the qualification for DCE's margin depository business, DCE's requirements for business, technology and emergency response, supervisory management, violation handling and other factors for the depository banks. In addition, the qualified depository banks shall sign the *Agreement on Futures Margin Depository Business* with DCE before offering the futures margin depository services, so as to specify the respective rights and obligations of both sides.

Key consideration 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness,

capitalization, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.

The *Measures for Designated Depository Banks Management of Dalian Commodity Exchange* made specific business and technical requirements for depository banks. DCE strictly follows the Measures to strictly monitor the risks of the depository banks.

When there are changes in the position setting, provisions on responsibility, department heads, business contacts, etc. of the margin depository department at a depository bank, the changes shall be reported to DCE and the monitoring center in writing within 3 working days from the date of the changes.

Before upgrading or transforming the system or implementing other measures that may affect the futures margin depository business, the depository bank shall notify DCE, the monitoring center and the relevant members of DCE in writing 5 working days in advance, make effective efforts in information disclosure and system testing, and formulate relevant emergency plans.

When meeting with a major business risk or loss affecting the bank's credit status, the depository bank shall report the situation to DCE and the monitoring center within 3 working days from the date of the occurrence of the risk or loss, and submit a written report on the analysis of the impact of the business risk or loss on the bank's margin depository business as well as the countermeasures. When there are potential or foreseeable risks in overseas financial markets and capital markets, the depository banks shall promptly notify DCE of the market risks and provide support for the prevention of risks.

Within one month after the end of each year, the depository banks shall submit their summary reports on their margin depository business in the previous year to DCE and the monitoring center. The contents of the summary report include but are not limited to: the depository bank's operation of the margin depository business in the previous year, services, technical operation, risk management, operational errors and technical failures, implementation of relevant laws, regulations, rules, policies and self-discipline rules of futures market, etc.

DCE checks the qualifications of the depository banks annually, or conducts irregular inspections as needed. In the annual evaluation of the depository banks' futures margin depository business, DCE comprehensively assesses the safety, accuracy, timeliness and liquidity of the banks' operation of the

business. The assessment covers the depository banks' qualifications, system operation and maintenance, staffing, business operation, risk control, innovative futures services and satisfaction surveys, etc.

DCE sets a security amount for the funds in the account at each depository bank. DCE monitors and manages the liquidity risks of the depository banks on a daily basis. DCE has deposited the funds in 16 depository banks separately, while allowing the clearing members to open accounts in a number of depository banks. DCE has the right to transfer the margins in the members' dedicated fund accounts across banks. The measures mentioned above can effectively monitor and manage the accumulation of credit and liquidity risk exposures of the depository banks.

Key consideration 4: If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.

Not applicable.

Key consideration 5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.

The *Agreement on Futures Margin Depository Business* signed by DCE and the depository banks stipulates that the depository banks shall handle the transfer business in accordance with the notes or instructions provided by DCE; for the transfer of the funds between the accounts within a single bank system, the funds shall be transferred to the fund account designated by DCE in real time upon receipt of the transfer notes or instructions issued by DCE or DCE members; for the inter-bank fund transfer, the depository banks shall ensure to transfer out the funds in the quickest way immediately upon receipt of DCE's fund transfer notes or instructions; the depository banks shall adjust the business handling time accordingly according to the changes in DCE's trading and settlement time as well as the demand of the futures margin depository business; the depository banks shall refuse any other institution or individual that requires to freeze, retain or transfer the funds in the dedicated settlement account, so as to guarantee the safety of the futures margins deposited by DCE; if any other institution or individual intends to take the measures such as freezing for the members' dedicated margin accounts, which will affect the margin depository business, the depository banks shall inform DCE in advance. Once the transfer occurs, it is final and irrevocable.

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

Key consideration 1: An FMI's rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.

According to the *Measures for Delivery Management of Dalian Commodity Exchange*, the commodity futures contracts traded on DCE are based on physical delivery. Physical delivery refers to the process in which the both parties in the transaction close the open positions by transferring the ownership of the underlying products in accordance with the requirements of the contracts and rules. Physical delivery can only be performed by members. The members make physical delivery on behalf of their clients. The clients entrusting the overseas brokers to participate in futures trading shall entrust the overseas brokers to handle the delivery, and the overseas brokers shall then entrust the operations to the futures company members. The physical delivery can be performed by using standard warehouse receipts or through other delivery methods. According to different sites of storage of underlying products, the physical delivery of futures includes warehouse delivery, factory warehouse delivery and other delivery methods. Based on different situations of tax payment for delivered goods, the physical delivery of futures can be divided into bonded delivery and tax-paid delivery.

The futures physical delivery can be performed by Exchange for Physicals (EFPs), bill of lading delivery, rolling delivery, delivery of every day selectable in whole month, one-time delivery, and other processes specified by DCE.

The rules such as the *Trading Rules of Dalian Commodity Exchange*, the *Measures for Delivery Management of Dalian Commodity Exchange*, the *Measures for Clearing Management of Dalian Commodity Exchange*, the *Measures for Standard Warehouse Receipt Management of Dalian Commodity Exchange* and the *Measures for Designated Delivery Warehouse Management of Dalian Commodity Exchange* clearly define the obligations and responsibilities of the buyers, the sellers, DCE and designated delivery warehouses. The above information is disclosed to the public on the DCE website.

DCE often organizes business trainings for members and investors to ensure that the members can master the physical delivery processes. When a new

product is launched or the rules are revised, DCE will send a notice to all members in advance and offer relevant business training to ensure that the members can learn in detail about the changes of physical delivery processes.

Key consideration 2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or commodities.

The risks identified during the physical delivery process mainly include the risk of delivery default of the buyer and the seller and the risk of the storage of underlying products. The costs of physical delivery and commodity storage mainly include the delivery fee, storage fee and the in and out of the designated delivery warehouse fee.

With regard to the risk of delivery default during the physical delivery process, in accordance with the provisions of Chapter 9 of the *Measures for Delivery Management of Dalian Commodity Exchange*, In case a delivery default is committed, twenty percent (20%) of the contract value of the default portions shall be paid by the defaulting party to the non-defaulting party, and the delivery shall terminate between the buyer and the seller. In case both the buyer and the seller are in default, DCE shall terminate the delivery and impose a fine of five percent (5%) of the contract value of the portions in default respectively against the buyer and the seller. In case partial delivery default occurs to a Member, the standard warehouse receipt, or payments, received by the default Member may be used to handle the default.

For the storage risk of underlying products, the *Measures for Designated Delivery Warehouse Management of Dalian Commodity Exchange* has the following provisions: first of all, the designated delivery warehouses shall obtain the approval from DCE before participating in futures delivery; secondly, before performing the delivery, the designated delivery warehouses shall sign the agreements with DCE and pay the “risk deposit” as the pledge for performing their obligation; thirdly, the designated delivery warehouses are responsible for the storage of the underlying products and bear the responsibilities for the quality and quantity of the underlying products; fourthly, each year DCE carries out annual inspections of the designated delivery warehouses, and irregularly conducts on-site inspections. For problems discovered during the inspections, DCE has the right to instruct the designated delivery warehouses to make improvements or to compensate for financial loss. If the circumstances are serious, the qualification for the designated delivery warehouse will be cancelled, and even the legal liability will be pursued.

In the *Measures for Standard Warehouse Receipt Management of Dalian*

Commodity Exchange and the Detailed Rules for Specific Futures Products, DCE details the requirements and procedures for registering standard warehouse receipts. In the warehouse delivery, DCE introduces third-party institutions to examine the quality of underlying products and ensure the storage meets the delivery standards of the futures contracts. In the factory warehouse delivery, in order to guarantee the quality and quantity of underlying products, the factory warehouses must have the *Bank Letter of Performance Guarantee* or other guarantee recognized by DCE when registering the warehouse receipts. If the value of underlying products fluctuates significantly, DCE may require the factory warehouses to adjust the risk deposit. If the owner of underlying products and the designated delivery warehouse have disputes over the delivery quality, they may apply for re-inspection and pursue the responsibility of the designated delivery warehouse based on the re-inspection results. If a client and a designated delivery warehouse have delivery dispute, they may apply to DCE for mediation.

When a new product is launched, DCE will clearly specify delivery expense standards, such as the delivery fees, warehousing and loss fees, and the ceiling price for the in and out warehouse fees, in the rules and related notices. DCE also track the market changes closely, and analyze and adjust the expense standards timely.

In addition, for the bonded delivery, the relevant provisions are detailed in the *Measures for Delivery Management of Dalian Commodity Exchange* and Detailed Rules for Specific Futures Products.

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

Key consideration 1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs, regardless of whether the FMI settles on a gross or net basis and when finality occurs.

DCE is not an exchange of value system, but DCE does provide a platform for its members to use for settlement. Details on settlement of physically delivered contracts are available in Principle 10 of this report. For money settlements,

see Principle 9 in this report for details.

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.

Summary Narrative

Key consideration 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.

The rules and procedures of DCE clearly define the events of default and the methods of identifying a participant default. DCE implements a hierarchical responsibility system in risk prevention. DCE shall prevent the risks from the members, the members shall guard against the risks from their clients and overseas brokers, and the overseas brokers shall ward off the risks from their clients.

The breaches of contract identified by DCE include: the members failing to perform their contract–related obligations and responsibilities; the delivery defaults, etc. The member's failure to perform the contract–related obligations and responsibilities means that the member's clearing deposit is lower than the minimum balance after the settlement is completed. Except as otherwise provided by DCE, the delivery default includes the following circumstances: the seller fails to deliver the standard warehouse receipt in full within the specified time limit; within the specified time limit, the buyer fails to make the payment for the goods in full.

The *Measures for Clearing Management of Dalian Commodity Exchange* stipulates that when a member fails to perform the contractual obligations and responsibilities, DCE has the right to take the following protective actions: to utilize the Member's clearing deposits; to suspend opening for trading; to conduct forced liquidation pursuant to the applicable rules until the margins released after the liquidation are sufficient to perform the contractual obligations or liabilities; and to convert the Assets as Margins into cash, so as to use the proceeds from such conversion to perform the contractual obligations or liabilities. DCE shall take the following actions to perform the contractual obligations or liabilities in case the Member is still in debt after the preceding actions have been taken.: to revoke the Member's membership and use its membership fee for compensation; to utilize the risk reserves to provide compensation for the contractual performance; to utilize DCE' s own assets to

provide compensation for the contractual performance. After fulfilling the contractual obligations and responsibilities, DCE will claim compensation from the member through legal procedures, and draw the risk reserve again according to the rules when necessary.

In case of the delivery default, the defaulting party shall pay a penalty of 20% of the contract value to the observant party, and the delivery shall be terminated. In case both the buyer and the seller commit the default, a fine shall be imposed by DCE respectively against the buyer and the seller at five percent of the contract value of the default portions calculated at the delivery settlement price. When a member defaults in part of delivery, the standard warehouse receipt or the payment received by the defaulting member may be used for dealing with the default.

Key consideration 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.

With internal management systems and work processes, DCE clearly defines the roles and responsibilities of the executive management in dealing with default. DCE conducts regular and irregular reviews of the internal management systems and working processes to make sure the default procedures are well-designed and can be executed properly.

To deal with the risks for trading, settlement, delivery and technology and other emergencies that seriously affect or may seriously affect the market security and stability, DCE has formulated emergency plans and processes, which stipulates clear processes for prevention, response and resolution, so as to ensure that DCE can carry out the businesses in a normal, comprehensive and adequate manner and conduct the regular activities of operation and management.

DCE has maintained close contact and communication with CSRC and the China Futures Market Monitoring Center (CFMMC). In the event of a default, DCE will contact the regulatory authorities in a timely manner. If necessary, the risk reserve may be utilized with the approval of CSRC.

Key consideration 3: An FMI should publicly disclose key aspects of its default rules and procedures.

The procedures of dealing with the members' defaults are detailed in the *Trading Rules of Dalian Commodity Exchange*, the *Measures for Clearing Management of Dalian Commodity Exchange*, the *Measures for Delivery*

Management of Dalian Commodity Exchange, the Measures for Risk Management of Dalian Commodity Exchange and the Measures against Rule Violations of Dalian Commodity Exchange, with the contents including the default handling measures, the scope for the measures taken, the implementers of the measures taken, and the mechanisms to ensure performance, etc. The information mentioned above has been disclosed on the DCE website.

Key consideration 4: An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.

Each year, DCE organizes the members to participate in the testing and emergency drills of scenarios and procedures for defaults such as using the clearing deposit, restricting the opening of positions and forced position liquidation, and strengthens contacts with CSRC, CFMMC and market participants.

In formulating and revising the rules related to default, DCE will also actively solicit opinions and suggestions from market participants, and consider them comprehensively in the process.

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

Key consideration 1: A CCP should, at a minimum, have segregation and portability arrangements that effectively protect a participant's customers' positions and related collateral from the default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.

DCE has well-designed systems and segregation arrangements to adequately protect the positions and collateral of clients from the impact of the members' default or bankruptcy.

DCE conducts clearing for all members. There are two types of membership,

futures company members and non-futures company members. Article 17 of the *Regulation on the Administration of Futures Trading* stipulates: “No futures company may engage in any self-operation business of futures or do so in any disguised form.” So there is no issue of misappropriation between the proprietary positions of members and those of their clients.

According to Article 78 of the *Measures for the Administration of Futures Exchange* and Article 21 of the *Trading Rules of Dalian Commodity Exchange*, DCE adopts the client trading code system. The members and the clients shall abide by the system of one code for one client, and shall not trade with mixed codes. The trading code system ensures that the Exchange can separately record the positions, trading margin and collateral of each client through the client’s code, which offers practical foundation for position transfer of clients when member defaults or goes bankrupt.

The Chapter V of the *Measures for the Supervision and Administration of Futures Companies* stipulates that the margin of clients and the assets authorized by clients shall be client assets and be owned by clients. Client assets shall be independent from the assets of futures companies for separate management. A futures company shall open a futures margin account at a futures margin depository bank. After opening, modifying or canceling a futures margin account, a futures company shall undergo recordation formalities at the institution monitoring the safe custody of futures margin on the same day and disclose information on the opening, modification or cancellation of the account to the client in a prescribed manner. A client shall register the settlement account opened in his or her own name to deposit and withdraw futures margin with a futures company. The futures company and the client shall deposit and withdraw margin by transfer under the futures margin account that has been granted recordation and the futures settlement account that has been registered.

The Chapter V of the *Measures for the Supervision and Administration of Futures Companies* also stipulates: “Client assets may not be seized, frozen, deducted or enforced, except for the client’s own debt or any other circumstance prescribed by any law or administrative regulation. When a futures company enters the bankruptcy or liquidation procedure, its client assets shall not belong to bankruptcy or liquidation property.” The member may file an application for position transfer, which can be processed after being approved by the Exchange if it is under any of the following circumstances: the merger or, consolidation, separation, bankruptcy or insolvency of the member; the member failing to conduct the futures brokerage business due to some reasons; or changes to the clearing entrustment relationship. Under the special circumstance that the futures company member does not file an application

when it suffers from significant operation crisis such as insolvency, the Exchange may initiate the emergency pre-plan and handle client position transfer to protect the clients' rights and interests.

The above segregation and portability arrangements of DCE for the clients' assets are clearly supported by China's laws and regulations such as *the Civil Code*, the *Regulation on the Administration of Futures Trading*, the *Measures for the Administration of Futures Exchange* and the *Measures for the Supervision and Administration of Futures Companies*, and are therefore enforceable.

Key consideration 2: A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer accounts or in omnibus customer accounts.

DCE employs one code for one client and single client account structure, and establishes a position account for each client to record transaction information and calculate margin demand in the duration. DCE establishes a margin account for each member to record the information about the member's margin changes every day, requires the futures company members to establish margin detail accounts for their clients and overseas brokers, and conducts daily check and account maintenance for the clients' position information, margin account balance and amount of fund settlement.

DCE can obtain the clients' equity data through CFMMC. The futures companies submit the clients' transaction and settlement data to CFMMC every day. CFMMC is responsible for monitoring the security of the futures margins. It will notify the regulatory authorities and DCE in time once problems occur.

In view of the above institutional arrangements, the assets of different clients under the same member are segregated, and there will be no occupation or misappropriation of other clients' assets because of a certain client having insufficient funds. Once a client's margin is insufficient, the member will first make up for it with own funds.

Key consideration 3: A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.

The position transfer system of DCE supports the transfer of the positions and collateral of a defaulting participant client to one or more other participants. According to Article 54 of the *Measures for Clearing Management of Dalian*

Commodity Exchange, when a futures company member cannot engage in the futures brokerage business because of merger, splitting, bankruptcy or any other reason, or changes the entrusted relationship with a foreign brokerage institution, the futures company member and the clients can submit the application, and handle the position transfer business with the approval from DCE. Under the special circumstance that the futures company member does not file an application when it suffers from significant operation crisis such as insolvency, the exchange may initiate the emergency pre-plan and handle client position transfer to protect the clients' rights and interests.

Key consideration 4: A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular, the CCP should disclose whether customer collateral is protected on an individual or omnibus basis. In addition, a CCP should disclose any constraints, such as legal or operational constraints, that may impair its ability to segregate or port a participant's customers' positions and related collateral.

DCE's arrangements for segregation and portability have been stipulated in the *Measures for Trading Management of Dalian Commodity Exchange* and the *Measures for Clearing Management of Dalian Commodity Exchange*, and have been disclosed to the public on the DCE website.

At the same time, the *Measures for the Supervision and Administration of Futures Companies*, the *Interim Measures for the Administration of Futures Investors' Guarantee Funds* and the *Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Futures Dispute Cases* provide the legal basis for the segregation and portability arrangements of DCE. It has not been found that the segregation and portability arrangements of DCE are subject to legal or operational constraints.

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 materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Summary Narrative

Key consideration 1: An FMI should have robust management and control systems to identify, monitor, and manage general business risks, including losses from poor execution of business strategy, negative cash flows, or

unexpected and excessively large operating expenses.

Based on the internally set development strategy and control objectives, DCE comprehensively considers internal and external factors, continues to collect relevant information in an inclusive and systematic way, and identifies monitors and manages general business risks in light of actual business conditions. The identified general business risks include: financial risks and investment risks, etc.

In order to continuously monitor and manage general business risks, DCE has established a complete financial internal control system. By formulating a series of rules and systems such as the Financial Management System, the Accounting System, the Financial Expenditure Approval System and the Expenditure Management System, DCE ensures the safety and efficiency of the financial operations.

DCE makes the fund plan every month, and currently the cash flow is sufficient with the capital in good condition.

Key consideration 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.

The liquid net assets of DCE are relatively abundant, and increase rapidly enough to cover general business losses. Characterized by high liquidity, the equity assets of DCE can maintain the continuity of business operations and services in the face of general business risks.

Key consideration 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.

According to the provisions of the *Bylaws of DCE*, the exchange will be terminated in one of the following circumstances: dissolution as decided by the

Members' Meeting; merger or division of the Exchange; or closure as decided by CSRC. Upon any termination of the Exchange, it shall set-up a liquidation group and go into liquidation.

DCE has also formulated an Emergency Response Plan and related procedures and measures, and has sufficient high-liquidity equity assets, which are adequate to cover at least six months of operating costs and ensure sustainability of the businesses.

Key consideration 4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.

The liquid net assets of DCE are mainly in the form of bank deposits, and are deposited separately in a number of large-sized state-owned commercial banks.

The Finance Department of DCE makes bank balance statements of current and time deposits every month, summarizes and analyzes the use of funds and the maturity dates of time deposits in the month, and collects the capital use plans of major departments at the beginning of each month, so as to properly arrange the use of funds and ensure that the fund is liquid enough to meet the demand of the business.

Key consideration 5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and updated regularly.

DCE has sufficient capital, and does not plan to raise additional capital for the time being. This article is not applicable.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimize 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 risk.

Summary Narrative

Key consideration 1: An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.

DCE's own funds and the participants' margins are deposited in the

designated depository banks as required. There are 16 DCE designated depository banks at present, all of which are banks established in China's mainland and are supervised and administrated by China Banking and Insurance Regulatory Commission.

According to the relevant requirements in the *Measures for Designated Depository Banks Management of Dalian Commodity Exchange*, DCE sets admittance standards for depository bank. (for details, please refer to the Chapters 2, 4 and 5 of the *Measures for Designated Depository Banks Management of Dalian Commodity Exchange*). Each year, DCE conducts annual qualification checks and business evaluation for the depository banks. They examine the qualifications for the depository bank, system operation and maintenance, staffing, business operations, risk control and other aspects, and coordinate the arrangements for the businesses of the depository banks and the cooperation projects between the two sides on the basis of the results of the annual assessment.

Key consideration 2: An FMI should have prompt access to its assets and the assets provided by participants, when required.

DCE's own funds and the participants' margins are deposited in the designated depository banks in the form of current or short-term time deposits. According to the relevant provisions of the *Measures for Clearing Management of Dalian Commodity Exchange* and the depository agreements signed by DCE and the depository banks, DCE can directly issue instructions to the depository banks, and quickly obtain its own funds and the margins paid by the participants.

The depository agreements signed between DCE and the depository banks specify the rights and obligations of both parties. The agreements have legal effect and are protected by the *Commercial Bank Law of the People's Republic of China* and other relevant laws and regulations.

Key consideration 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.

The margins submitted by DCE participants are currently deposited in 16 designated depository banks. DCE requires the members to open dedicated fund accounts with at least two depository banks for the purpose of diversifying risks. DCE conducts monitoring of the liquidity and concentration of the margins deposited in depository banks. In order to test the security of the deposited margins, DCE may transfer the margins across the depository banks

at any time.

DCE's own funds are deposited in five state-owned designated depository banks. For its own funds, DCE has clearly set the proportion limit for the balance of deposits in a single bank. The Finance Department sums up the balance statements on the deposits in all banks every month, and evaluates the concentration of funds according to the proportions of the deposits in the total amount of funds, so as to generally manage the risk exposures of each bank and rationally arrange the deposit structure according to the capital budget plan. DCE carries out the annual qualification examination and business evaluation of the depository banks every year.

Key consideration 4: An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.

DCE adopts a prudent investment strategy, which is consistent with its overall risk management strategy and is fully disclosed to participants. DCE's own funds are cash or short-term time deposits, which are deposited separately in five large-sized state-owned commercial banks to ensure the safety of the funds.

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

Key consideration 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.

DCE has established a robust operational risk-management framework with appropriate systems, policies, procedures and control to identify, monitor and manage operational risks.

The main operation risks currently identified by DCE include: technical

operation risks (such as technical system collapse and network intrusion or destruction), risks caused by insufficient system capacity, personnel operation risks, human resource risks (such as the risks caused by insufficient manpower or the personnel lacking relevant skills), external third-party risks (such as communication and power interruption), and events of extensive influence (such as terrorist activities, epidemics, and natural disasters).

DCE has effectively identified and controlled operational risks by establishing procedures and control documents that are compatible with the international standard quality management systems and information security management systems. These international standards include, but are not limited to, the quality management system ISO9001, the IT operation service management process ISO20000, the business continuity management system ISO22301, and the information security management system ISO27001, etc.

With regard to the risks of the wide-reaching technical operation events, DCE manages the risks by setting up corresponding redundant system, data backup system and disaster recovery centers and other means, and has established relevant emergency systems and mechanisms. For personnel operation risks, DCE takes the measures such as organizing business simulation and making operational process manual and emergency response process in management, and conducts performance assessment on the basis of operational audit results. For human resource risks, DCE carries out the management through strict recruitment, meticulous training, signing confidentiality agreements, providing competitive remuneration packages and other measures.

After the outbreak of COVID-19 pandemic in early 2020, DCE initiated a work group to organize its own battle and make plans to help the industry fight against the pandemic. For example, DCE extended its market open day from January 31st to February 3rd. Considering the lack of one trading day, the exchange delayed its execution of the forced liquidation on clients' positions which had exceeded the predefined limit. Since quite a few future company members had encountered some difficulties in maintaining enough staff to support both daily and night trading operation due to the quarantine time, DCE suspended its night trading session from the evening of February 3 (resumed on May 6). At the beginning of the outbreak of the pandemic, the risk management demand of egg industry surged, especially in Hubei Province. In order to ensure the safety of all parties participating in the delivery of egg futures, DCE offered more support to the picking-up, set up factory warehouses and allowed FOB delivery in other areas. In order to reduce the cost of members' participation in futures trading and delivery, the exchange reduced the trading commissions of some products and temporarily exempted both the delivery fees and the collateral fees of using standard warehouse

receipts as margin. In 2020, the total amount of reduced commissions and fees reached 3.6 billion yuan.

To support Hubei province, DCE exempted the member's fee and the commission of members from Hubei. DCE also set up 5 "insurance and future" programmes and invested 5 million yuan to support it. In addition, DCE initiated an enterprise risk management plan to support over 50 projects of small enterprises. In order to support the medical treatment in Hubei province, DCE donated 9 million yuan to local charity group.

Combined with the actual situation of pandemic prevention and control, in order to effectively deal with any emergency when trading, settlement, delivery, exercise, fulfillment and other businesses cannot be normally carried out because of force majeure events or computer failure, DCE improved its abnormality handling rules and other emergency response rules in September, 2020.

Key consideration 2: An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.

The technical committee under the board of governors of DCE provides opinions and suggestions for the board on the routine maintenance, renovation and transformation of DCE's trading system, the information system and network security, etc., in a bid to facilitate the safe and stable operation of the trading system.

The executive management of DCE is responsible for the authorization of daily operational risk management, with the specific duties performed respectively by the technology planning office, the technology operations and maintenance center and the Futures IT Co., Ltd., whose responsibilities and roles have been clearly defined.

The release and implementation of the designs of organizational structure, staffing, and procedure related to the operational risk management of DCE are subject to the approval of the executive management. The functional departments and the market risk control committee review the operational risk management system based on the changes in the businesses and market developments, and conduct necessary management of the operational risks. DCE evaluates and adjusts the framework from time to time based on market developments.

Whenever major system changes occur or new systems and new businesses are launched, DCE will solicit the market participants' opinions by various means such as market research, rule design and specification, system development and testing, simulated trading, market-wide testing and application for business or system changes in accordance with business rules and technical standards. Only with the approval of CSRC and other relevant parties will DCE officially introduce the major system changes.

The DCE accepts the information security audit by the Securities Information Office of CSRC, the Network Security Detachment of Dalian Municipal Public Security Bureau and other authorities.

Key consideration 3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.

The goal of operational reliability set by DCE is: No break in trading and no confusion in data. Safety and efficiency are set as key objectives. The steadiness and safe operation of the information system is the basis of market stability. Since the core system of DCE was launched, its availability has remained above 99.99%.

In order to achieve the above objectives, DCE has invested sufficient resources in technical system construction, infrastructure development, business optimization and innovation. The important systems, data and operational processes of DCE have multiple backups in the “three centers in two places” .

In accordance with the principle of minimizing authorization, DCE has ensured the high stability of operation through proper authorization and approval processes, the mechanism of independent operation and review and other means. All key operations at DCE require dual-position operation, with the execution and review separated. The operations are conducted in a standardized way based on the operation manual, and the high-risk operations can only be implemented after effective evaluation. DCE also adopts technical means such as technical automation-based start-stop operation mechanism to improve stability.

Key consideration 4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.

When a system is built and major changes occur, the detailed monitoring data on the daily, weekly and monthly basis will be analyzed to generate corresponding evaluation reports. When the pressure and capacity exceed the predetermined threshold levels, the expansion can be started to ensure the expansibility and sufficiency of the system with the approval based on the management process. The expanded capacity shall be at least 3 times the historical peak.

DCE has detailed rules for the business interruptions or other emergency scenarios (including the circumstances that are close to or beyond the operational capability) of each system, and conducts regular drills, inspections and updates for the business continuity plans, disaster recovery plans and emergency plans.

Key consideration 5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.

DCE has established an information security management system to control and guarantee information security, including the physical security-related access control mechanism, which specifies physical threats at low to high-risk sites such as office space, control centers, and computer rooms.

All policies, procedures and control measures of DCE for physical security and information security comply with relevant national standards and industry standards, including but not limited to: *ISO/IEC 27001* (information security management system requirements), *GB/T 22239-2018* (basic requirements for hierarchical protection of information system security), *JR/T 0060-2010* (basic requirements for hierarchical protection of information system security in the securities and futures industry). The technology center of DCE has obtained the certification of *ISO/IEC 27001* information security management system, and the information security assurance mechanism has been strictly implemented in accordance with the requirements of the control measures in the standards.

To deal with the risks of system changes, DCE has set up a complete management system, the *Measures for Changes Management of Dalian Commodity Exchange*, which can effectively control the risks of system changes.

For project management risks, DCE has established the information system project management mechanism and the mechanism for management of launching supporting system, which can effectively prevent the occurrence of

project risks, guarantee project quality, and ensure the safe and effective operation of the systems. At the same time, the project development environment is strictly isolated from the system operating environment, so as to prevent risk transmission and ensure the normal operation of the online system.

For information system vulnerabilities, DCE conducts information security assessments on a regular basis and when major systems and changes are launched. DCE rectifies, reviews and archives the vulnerabilities in relevant procedures.

Key consideration 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.

DCE has established a complete management process to ensure the continuous operation of important businesses, including strategy, organizational structure, methods, standards and procedures, which can effectively deal with interruptions. In the event of major technical failure, the operation of the core trading system can be restored within 15 minutes by the backup center.

DCE sets up its disaster recovery system in strict accordance with the application levels and recovery levels clearly defined in its business continuity plan, and guarantees the business operations through the established emergency plans. There are two emergency plans, namely, the *Plan of Dalian Commodity Exchange for Information System Emergency Response and Disaster Recovery* and the *Emergency Plan of Dalian Commodity Exchange for Information Security Incidents*, which establish emergency response mechanisms for all personnel, services and operation of businesses, as well as service providers and institutions.

DCE's emergency programs can store all transaction data and ensure information integrity in a number of ways. The trading system of the DCE is characterized by real-time backup and review. Once data loss occurs, the trading system can recover by backup data.

In the *Emergency Plan of Dalian Commodity Exchange for Information*

Security Incidents, DCE clearly defines the procedures for effective internal communication and external notification, specifies explicit time, contents, measures and routes for notification according to the emergency organizational structure and the duties and roles, and details the process of summarizing and tackling the faults and the problems in the emergency response after the event.

Every year DCE regularly organizes at least 1 or 2 market-wide drills and more than 10 emergency tests, which cover all information systems, so as to test the integrity, operability and effectiveness of the business continuity plans, verify the availability of the business continuity resources, and improve the ability to cope with disaster events in a coordinated way. DCE analyzes and summarizes the tests and drills, and then reports to CSRC. According to the actual drills, DCE revises and improves the business continuity plans and emergency plans, and formulates the continuous improvement plans.

Currently DCE has completed the construction of the disaster recovery system of the “three centers in two places” .

Key consideration 7: An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should identify, monitor, and manage the risks its operations might pose to other FMIs.

DCE currently identifies the following risks from third parties: the risk of communication line interruptions related to the communications operators, the risk of power outages, the risk of the errors of the software provided by software vendors due to changes and upgrades, and the risks caused by business interruptions of other core institutions.

DCE takes the following measures to manage the risks mentioned above: systematically monitoring the communication network and data transmission; using multiple network providers simultaneously, and establishing systems with redundancy; setting up disaster recovery centers; conducting adequate analysis and testing in installing new software and upgrading software; conducting real-time monitoring and analyzing of announcements or information from CSRC、 other core institutions and public medias, meanwhile, reporting and dealing with the potential risks according to the industry rules.

The key services of DCE are not outsourced. Regarding other peripheral services such as hardware and communications, DCE has signed service guarantee agreements with providers to meet the requirements of reliability and emergency. DCE has no connections with other FMIs.

Principle 18: Access and participation requirements

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

Summary Narrative

Key consideration 1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.

In the context of the all-member clearing system, DCE has defined the access criteria and requirements for its members, and ensured that members and other market participants have access to the services fairly and openly.

First of all, in terms of access criteria and requirements for the members, there are two main types of direct participants in DCE, namely, futures company members and non-futures company members. Indirect participants include clients of futures company members, and overseas brokers and their clients.

In terms of admittance of futures company members and non-futures company members, DCE has established corresponding criteria and requirements for participation, including sufficient registered capital, good reputation and operating history, sound structure, adequate staffing, etc., which are respectively reflected in the Article 25 of the *Regulation on the Administration of Futures Trading*, Articles 5 and 10 of the *Measures for Membership Management of Dalian Commodity Exchange*, the *Measures for Clearing Management of Dalian Commodity Exchange*, the *Measures for Risk Management of Dalian Commodity Exchange*, the *Measures for Administration of Abnormal Trading of Dalian Commodity Exchange (for Trial Implementation)* and other rules.

According to Article 5 of the *Measures for Administration of Futures Company Members Entrusted by Overseas Brokers with Futures Trading Business of Specified Domestic Futures Products*, overseas brokers shall obtain the relevant qualifications granted by overseas regulatory agencies and meet the requirements for continuous operation, finance and technology, etc.

Secondly, in terms of members' rights, DCE has stipulated the rights of members, including attending the members' meeting, engaging in the prescribed trading, settlement, delivery, exercise, performance and other businesses on DCE, using the trading facilities provided by DCE, and obtaining information and services related to futures trading, etc. (For details, please refer to Article 21 of the *Bylaws of DCE*.) In addition, the operation norms,

rights and obligations of members in their daily operations have been stipulated in various detailed business rules of DCE.

Thirdly, the matters such as the participants' access and the rights held by the members have been clearly specified by DCE in the systems, rules and other forms at present, and have been disclosed to the market.

Key consideration 2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavor to set requirements that have the least-restrictive impact on access that circumstances permit.

The requirements set by DCE for the access of the members are reasonable with view to the safety and efficiency of the futures market, and are relevant to the specific risks of the commodity futures market. Related requirements have been publicly released to the market.

In terms of safety, on the premise of meeting the general requirements of the *Regulation on the Administration of Futures Trading* and the *Measures for the Supervision and Administration of Futures Companies*, the rules of DCE such as the *Bylaws of DCE* and the *Measures for Membership Management of Dalian Commodity Exchange* state the access conditions for the members. In setting the access conditions, fully taken into consideration was the rationality, as well as the demands of the domestic market and DCE for risk management. Specifically, it is required that the minimum registered capital and the minimum balance of the clearing deposit of the futures company members should be greater than those of the non-futures company members, which demonstrates DCE's principle that the conditions for participation should be matched with the specific risks of the participants.

In terms of efficiency, the *Measures for Membership Management of Dalian Commodity Exchange* and other rules have clearly defined the specific conditions, materials and procedures for the application, so that applicants can understand the application requirements in advance and improve the efficiency of the process (see Articles 5, 6, 7, 8, 9, 10 and 11 of the *Measures for Membership Management of Dalian Commodity Exchange* for details).

The contents related to the requirements for the participants in the *Measures for the Supervision and Administration of Futures Companies*, the *Measures for the Administration of Risk Supervision Indicators of Futures Companies* and the *Measures for the Administration of Futures Practitioners* shall be reviewed and revised by CSRC. The *Measures for Membership Management of Dalian*

Commodity Exchange shall be reviewed and revised annually by DCE as needed.

As noted above, the laws, regulations, rules and exchange bylaws, detailed business implementation rules, etc. are publicly available on the DCE website.

Key consideration 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.

At present, China's financial regulators have established a continuous monitoring mechanism for the members. DCE specifies its corresponding rights and measures that DCE can adopt under different violation circumstances according to relevant detailed implementation rules that have been publicly disclosed to the market.

First of all, the *Measures for the Administration of Risk Supervision Indicators of Futures Companies* issued by CSRC stipulates the standards for various risk supervision indicators such as the net capital, and calls for the futures companies to continue to meet the requirements of the standards (for details, please refer to Chapters 2 and 4 of the *Measures for the Administration of Risk Supervision Indicators of Futures Companies*).

Secondly, DCE has clearly defined the reporting obligation, supervision and administration of the members and other issues. If the members have major changes in business management and other aspects, they shall submit a written report to DCE within 10 working days (see Article 38 of the *Measures for Membership Management of Dalian Commodity Exchange* for details).

Thirdly, DCE has the obligation and right to track and verify the participants' complying with the relevant participation criteria. Article 41 of the *Measures for Membership Management of Dalian Commodity Exchange* stipulates that if a member suffers from poor financial management and operating conditions, long-term losses, significant decline in liquidity, or major problems found in annual inspections, DCE has the right to require them to make improvements within a given period of time. At the same time, the *Measures against Rule Violations of Dalian Commodity Exchange* clearly provides that DCE can exercise certain supervisory functions and powers on the members, including requiring the members to provide annual reports, conduct third-party audits, etc.; looking up and copying information and materials related to futures transactions; checking the members' futures margin accounts; examining the members' trading, settlement, financial and other technical systems. When a

member violates or no longer complies with the participation requirements, with the approval of the board of governors, DCE can cancel their membership, and make a penalty decision of declaring them as “market banned entrants” (see Articles 8 and 9, and Chapter 3 of the *Measures against Rules Violations of Dalian Commodity Exchange* for details.).

Each year, DCE also carries out sample or comprehensive inspections of the members' compliance with the business rules (see Article 40 of the *Measures for Membership Management of Dalian Commodity Exchange* for details).

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

Key consideration 1: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.

Under the framework of the current laws and regulations, exchange rules and supporting detailed rules, DCE implements a multilevel participant arrangement for the all-member clearing system. Through the “see-through regulation” and related coding mechanisms and system designs, DCE can collect basic account information of indirect participants, thus identifying, monitoring and managing the substantial risks arising from the hierarchical participation arrangement.

DCE employs a multilevel participation system and all-member clearing, which includes direct participants and indirect participants. Direct participants are futures company members and non-futures company members. Indirect participants are the clients of futures companies and the overseas brokers. DCE settles with the members, the futures company members settle with their clients and overseas brokers, and the overseas brokers settle with their clients.

By linking with the data of the China Futures Margin Monitoring Center (the Futures Unified Account Opening System), DCE has access to the clients' basic information, including name, ID number, mailing address, and contact number, etc. Relevant information is updated in real time with the members' update.

DCE implements a hierarchical responsibility system in risk prevention. DCE guards against the risks of its members. The members take precautions

against the risks of its clients and overseas brokers. The overseas brokers prevent the risks of their clients. Through trading codes, DCE can accurately identify the information of the members and the clients about transactions, positions, margins, profits and losses, etc. so as to evaluate the potential risks of the participants at all levels. There are two main risks identified by DCE that may be caused by the hierarchical participation arrangement: the first is the risk of potential default of clients or futures companies due to insufficient margins; the second is the risk caused by the trading behaviors violating rules.

In response to the risk of default, DCE has developed a comprehensive risk control system, including the position limit mechanism, the large position report mechanism, the price limit mechanism, the margin mechanism, and the risk warning mechanism.

To deal with the risk stems from rules violation that arise due to trading behaviors, DCE investigates, determines and penalizes the violations of the members, the clients and other market participants in accordance with the provisions of the *Measures against Rule Violations of Dalian Commodity Exchange*.

Key consideration 2: An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.

DCE has the ability to identify the substantive dependencies between the direct and indirect participants that may have an impact on DCE.

With the “one code for one account” system, DCE has information about the positions and the trading orders of the members and their clients, thus mastering the substantive dependencies between direct and indirect participants, and conducting monitoring through the large position report mechanism and other means.

In addition, DCE and futures companies submit the clients’ transaction and settlement data to China Futures Market Monitoring Center (CFMMC) on a daily basis. The CFMMC is responsible for monitoring the safe custody of the futures margin, and in case of problems, it will promptly send early warning to the regulatory authorities and DCE. DCE can also obtain the clients’ equity data from CFMMC when necessary.

Key consideration 3: An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order

to manage the risks arising from these transactions.

DCE is able to identify the proportion of the activities carried out by a direct participant on behalf of indirect participants within the scope of direct participant 's capacity; a direct participant representing a large number of indirect participants to carry out activities; an indirect participant occupying a significant proportion of the system's turnover; an indirect participant whose trading volume or turnover is greater than that of the direct participant on whom they depend to access DCE, and DCE can manage the risks arising from those transactions.

DCE uses internal systems to record and monitor the transactions and positions of the members and clients, and conducts risk control on the transactions, including checks on position limits and minimum margin requirements. DCE manages risks by implementing the price limit mechanism, the margin mechanism, and the large position report mechanism, etc.

In addition to the risk controls mentioned above, DCE also adopts various measures such as members' inspections, risk management and violation warning publicity to prevent the risk caused by the trading volume or turnover exceeding the tolerance of the indirect participant.

Key consideration 4: An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.

DCE always adheres to the principles of openness, fairness, impartiality, prevention of systemic risks, and protection of investors' interests to review the rules and procedures mentioned above. When making plans for formulating and revising rules for the next year at the end of each year, DCE will review the above contents, and when there are business needs or related opinions in the market, DCE will also initiate the review.

When a member's risk exposure is too large, DCE will manage and control risks by taking the measures such as increasing the member's margin, implementing the position limit on the relevant product with excessive positions, and imposing forced position liquidation, on the basis of the *Measures for Risk Management of Dalian Commodity Exchange*. The members are responsible for managing the risks of the clients.

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

Key consideration 1: An FMI should be designed to meet the needs of its participants and the markets it serves, in particular, with regard to choice of a clearing and settlement arrangement; operating structure; scope of products cleared, settled, or recorded; and use of technology and procedures.

DCE attaches great importance to the demands of the participants and related markets, and has been building and developing the futures market by focusing on serving the real economy. The specific measures include: researching and developing the traded products on the basis of the industry and market demands; making effective efforts in market services according to industry demands, and guiding and facilitating the enterprises' rational participation in the futures market; ensuring that the prices are reasonable and effective on the basis of the principle of "openness, fairness and impartiality" ; giving play to the positive role of the futures market in advancing industrial upgrading to meet the demand for economic development.

In addition, DCE has vigorously participated in various global industry organizations such as WFE, so as to follow the changing trends and demands of the market worldwide. By referring to the advanced CCP business guidelines in the world, DCE has made improvements in selecting the arrangements for clearing and settlement, the use of technologies and other aspects.

DCE has listened to the opinions of the participants and the market players through public consultation, market seminars and other means, so as to ensure that the products and services launched can continuously meet the needs of the participants and related markets.

Key consideration 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.

The goal of DCE is to "build itself into a world-class derivatives exchange with a complete series of derivatives instruments, a wide variety of products, functions brought into full play, and safe and efficient operation, and develop into an important center for risk management and pricing of commodities in the world" .

In order to achieve the goals mentioned above, DCE has, in its strategic development plan, set clear and measurable short-term and medium-term goals in structure of products, structure of investors, levels of market, trading volume, risk management, information system construction and other aspects,

and has provided corresponding guarantee for the key tasks.

DCE evaluates and confirms the completion of the goals through the analysis of the business indicators. The executive management assesses the work and tasks every six months and at the end of each year, and reports the results to the board of governors and CSRC; the board of supervisors evaluates the work of the executive management each year and reports the results to CSRC; the board of governors appraises the progress and effectiveness of implementing the long-term plans and goals.

Key consideration 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.

The executive management of DCE holds executive meetings regularly every year to assess the completion of each target and adjust specific steps. The executive management meets every year to listen to and review the work reports of various departments and committees, and conduct year-end assessments of them.

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.

Summary Narrative

Key consideration 1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.

DCE is currently using the communication protocol FTD that meets the national industry standard (JR/T 0016-2004) to complete data exchange and communication, and can meet the demands of existing businesses effectively. If necessary, DCE can interface with the system that uses the internationally common communication program, or introduce the protocol conversion module for connection, while the conversion may be realized with low cost and high efficiency.

Principle 23: Disclosure of rules, key procedures, and market data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Summary Narrative

Key consideration 1: An FMI should adopt clear and comprehensive rules and procedures that are fully disclosed to participants. Relevant rules and key procedures should also be publicly disclosed.

DCE has comprehensive and clear business rules and procedures and discloses them to the public on the DCE website. Notices on important issues such as revision of rules, changes of fees and system upgrades will also be released simultaneously on the member service system.

Through business presentations, contract rules symposiums, written questionnaires, etc., DCE solicits opinions on the explicitness and comprehensiveness of the rules and procedures in the market, and maintains close contacts with the industry participants.

The procedures for revising rules are laid down in the *Bylaws of DCE*. Specifically, the draft amendments to the bylaws and trading rules shall be drawn up by the board of governors and submitted to the members' meeting for deliberation and approval; the amendments to the detailed implementation rules of the trading rules and other measures shall be drafted by the CEO and submitted to the board of governors for deliberation and approval. According to the *Measures for the Administration of Futures Exchanges*, the revised bylaws and trading rules of DCE shall be approved by CSRC; DCE shall report to CSRC in advance before revising the detailed implementation rules of the trading rules.

The *Measures for the Administration of Futures Exchange* and the *Trading Rules of Dalian Commodity Exchange* stipulate how to define and deal with the irregularities.

Key consideration 2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.

DCE has explicitly disclosed the design and operation of the system, as well as the rights and obligations of itself and the market participants.

DCE discloses key information about system operation to CSRC according to the rules, and provides market participants with information about system design, implementation, testing, deployment and operation on the DCE website and member service system.

The rights and obligations of DCE and the market participants are clearly defined in the rules disclosed to the public, such as Chapter 3 of the *Bylaws of DCE* and the *Measures for Membership Management of Dalian Commodity Exchange*. The members can also access the member service system by means of authorized encryption to obtain data and statements related to clearing or risk management.

Key consideration 3: An FMI should provide all necessary and appropriate documentation and training to facilitate participants' understanding of the FMI's rules and procedures and the risks they face from participating in the FMI.

DCE has developed and revised rules and procedures using concise, understandable and clear statements. Based on the business developments and market research, DCE continues to improve the relevant systems of rules, and adjust and optimize the related business rules. Whenever old rules are revised or new rules are announced, various means such as video training and symposiums will be adopted to provide the relevant background, explanations of articles, risk warnings and precautions.

In terms of investor education, DCE has established various training and interactive platforms for different audiences in the aspects of promotion of knowledge to the investors, risk management and case-based warning education. 1. For industrial clients, practitioners and institutional clients, DCE holds symposiums in various regions in China every year to solicit opinions on revision of rules and answer questions raised by participants; 2. DCE has pushed forward the inclusion of the futures investor education in the national education system, and joined hands with the universities in China to implement the university projects; 3. DCE has offered distinctive arbitration training and CRO training. DCE has long produced the investor education products with the contents focusing on DCE's rules and regulatory cases, including but not limited to video, manuals, comics, books and WeChat H5.

If some participants are found to lack understanding of the rules, procedures and the risks of participation, DCE will explain to the participants through communication on telephone, written letters, face-to-face discussions and other means. If there are unclear and ambiguous contents in the rules, DCE will amend the relevant provisions in a timely manner. According to the feedback of the market, in the current communication modes, the participants can basically understand the rules, procedures and risks of participation. DCE has not experienced a risk event caused by the participants failing to understand the information mentioned above.

Key consideration 4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for comparability purposes.

DCE releases the fees for all individual services and the existing discount policies on the DCE website and the customer service system, including membership fees, trading fees, storage fees, etc. When adjusting the service charge standards, DCE will release relevant notices and announcements to the market in advance.

DCE also discloses the requirements for systems, interfaces and dedicated access to the public for participants' comparison.

Key consideration 5: An FMI should complete regularly and disclose publicly responses to the CPSS–IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.

Since May 31st of 2019, DCE has updated the evaluation report on the PFMI every year and published it in Chinese and English on the DCE website. DCE also published its quantitative disclosure files every quarter according to the *Public quantitative disclosure standards for central counterparties* published by CPSS–IOSCO in 2015.

In addition, DCE has adopted both Chinese and English languages to release the information including exchange rules, systems, organizational structure, trading tips and investor education, etc. on the DCE website and the member service system.

V. Resources Available to Public

1. *Civil Code of the People's Republic of China*

<http://www.npc.gov.cn/englishnpc/c23934/202012/f627aa3a4651475db936899d69419d1e/files/47c16489e186437eab3244495cb47d66.pdf>

2. *Regulations on Administration of Futures Trading (2007 version)*

http://www.csrc.gov.cn/pub/csrc_en/laws/rfdm/statelaws/201212/t20121221_219506.html

3. *Bylaws of DCE*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146723/6146727/6147395/index.html>

4. *Trading Rules of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146735/6147416/index.html>

5. *Measures for Information Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147666/index.html>

6. *Measures against Rule Violations of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147660/index.html>

7. *Measures for Designated Depository Banks Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147654/index.html>

8. *Management Measures of Dalian Commodity Exchange for Accounts Involving Actual Control Relationship*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147647/index.html>

9. *Regulatory Standards and Handling Procedures for the Measures for Administration of Abnormal Trading of Dalian Commodity Exchange (For Trial Implementation)*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147641/index.html>

10. *Measures for Administration of Abnormal Trading of Dalian Commodity Exchange (For Trial Implementation)*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147635/index.html>

11. *Measures for Hedging Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147629/index.html>

12. *Measures for Market Maker Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147615/index.html>

13. *Measures for Management of Options Trading of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147609/index.html>

[html](#)

14. *Management Measures on Futures Trader Suitability of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147596/index.html>

15. *Measures for Administration of Futures Company Members Entrusted by Overseas Brokers with Futures Trading Business of Specified Domestic Futures Products*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147590/index.html>

16. *Measures for Membership Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147584/index.html>

17. *Measures for Arbitrage Trading Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147578/index.html>

18. *Measures for Risk Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147572/index.html>

19. *Measures for Designated Delivery Warehouses Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147566/index.html>

20. *Measures for Standard Warehouse Receipt Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147560/index.html>

21. *Measures for Delivery Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147554/index.html>

22. *Measures for Clearing Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147543/index.html>

23. *Measures for Trading Management of Dalian Commodity Exchange*

<http://www.dce.com.cn/DCE/RulesRegulation/6146719/6146731/6146739/6147536/index.html>