

Zhengzhou Commodity Exchange
CPSS-IOSCO Principles for Financial
Market Infrastructures-based
Disclosure



May 2021

Contents

I.	Executive Summary.....	1
II.	Summary of Major Changes Since Last Disclosure	2
III.	General Background on ZCE.....	2
(I)	General Description of ZCE and the Markets It Serves	2
(II)	Organization and Governance Structure.....	5
(III)	Legal and Regulatory Framework	7
(IV)	System Design and Operation	9
IV.	Principle-by-principle Summary Narrative Disclosure	10
	Principle 1: Legal basis	10
	Principle 2: Governance	18
	Principle 3: Framework for the comprehensive management of risks	25
	Principle 4: Credit risk	31
	Principle 5: Collateral.....	39
	Principle 6: Margin.....	43
	Principle 7: Liquidity risk.....	50
	Principle 8: Settlement finality	61
	Principle 9: Money settlements	63
	Principle 10: Physical deliveries	67
	Principle 11: Central securities depositories.....	72
	Principle 12: Exchange-of-value settlement systems	72
	Principle 13: Participant-default rules and procedures.....	73
	Principle 14: Segregation and portability	76
	Principle 15: General business risk	80
	Principle 16: Custody and investment risks	84
	Principle 17: Operational risk.....	87

Principle 18: Access and participation requirements.....	94
Principle 19: Tiered participation arrangements.....	98
Principle 20: FMI links.....	100
Principle 21: Efficiency and effectiveness	101
Principle 22: Communication procedures and standards	103
Principle 23: Disclosure of rules, key procedures, and market data.....	104
Principle 24: Disclosure of market data by trade repositories.....	107
V. List of available public resources.....	107
VI. Disclaimer.....	111

Responding FMI: Zhengzhou Commodity Exchange

Jurisdiction in which the FMI Operates: People's Republic of China

Authority Regulating, Supervising, or Overseeing the FMI: China Securities Regulatory Commission

As-of Date of the Disclosure: December 31, 2020 Relevant

information available at: <http://www.czce.com.cn> For more

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I. Executive Summary

Zhengzhou Commodity Exchange (“ZCE” or the “Exchange”), established in 1990 with the approval of the State Council and in accordance with applicable laws, is a not-for-profit futures exchange providing both trading and clearing services performing its functions and duties in accordance with the *Regulation on the Administration of Futures Trading* and the *Measures for the Administration of Futures Exchanges* under the supervision and administration of the China Securities Regulatory Commission (“CSRC”), and exercises self-regulation in accordance with the *Bylaws of Zhengzhou Commodity Exchange and Trading Rules of Zhengzhou Commodity Exchange as well as relevant detailed rules and measures*.

As a central counterparty (“CCP”), ZCE provides venues, facilities, clearing services, and centralized performance guarantee for futures trading organized by it.

The participants of ZCE’s CCP clearing business include members, clients and overseas brokers. Members of ZCE are classified into futures brokerage members (“FB members”) who may engage in futures brokerage, investment advisory, and other business and should not directly or indirectly engage in any proprietary futures business and non-futures brokerage members (“Non-FB members”) who may only engage in proprietary business. Clients and overseas brokers should appoint an FB member for futures trading.

ZCE now can carry out its CCP clearing business under the laws of China only and has a well-founded, clear, transparent, and enforceable legal basis for such business.

In connection with the CCP clearing business, ZCE is exposed to a wide range of risks which mainly including: legal risks, credit risks, liquidity risks, operational risks, market risks, concentration risks, and general business risks. The Board of Governors of ZCE and its specialized committee are responsible for deliberating and evaluating the effectiveness of ZCE’s risk management policies, procedures and system and proposing advice and suggestions on the revision and improvement thereof. ZCE implements margin requirement, price limit, position limit, trading limit, large position reporting, forced liquidation and risk warning mechanisms to strengthen management of risks in futures trading and protect the

legitimate rights and interests of trading parties. ZCE effectively identify, prevent and resolve various risks by relying on trading, monitoring, clearing, and other systems to monitor trading, open positions and funds, etc. In addition, ZCE has established a complete internal audit system to ensure the smooth implementation of its risk management rules.

This report is produced based on a self-assessment of the CCP clearing business conducted by ZCE in accordance with the requirements of Principles for Financial Market Infrastructures (PFMI). The self-assessment has been performed according to the methods determined under the *Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology* and as at December 31, 2020.

II. Summary of Major Changes Since Last Disclosure

Compared with the previous disclosure, the main changes of this disclosure are as follows:

First, main business statistics are updated.

Second, treasury bonds are approved to be used as margins, therefore relevant text is updated.

Third, ZCE has been included by European Securities and Markets Authority (ESMA) in third-country-trade-venues(TCTVs) post-trade transparency and position limit assessment positive lists, and has been approved by the Monetary Authority of Singapore as a Recognized Market Operator (RMO).

III. General Background on ZCE

(I) General Description of ZCE and the Markets It Serves

ZCE, established in October 1990 and under the administration of the CSRC, is the first State Council-approved pilot exchange in the futures market and one of the four futures exchanges in the People's Republic of China.

The Exchange, a membership-based futures exchange, has its registered capital divided into equal shares and subscribed for by its members. Its members are entitled to elect, stand for election and vote, and the General Assembly of all members is the supreme governing body of the Exchange. The Board of Governors, the standing body of the General Assembly, is accountable to the General Assembly and has established the Strategic Advisory Committee and such specialized committees as the Products Committee, Trading Committee, Supervision

Committee, Self-Disciplinary Committee, IT Committee, Finance & Audit Committee, and Risk Management Committee. As a supervisory body, the Board of Supervisors inspects the financial affairs of the Exchange and supervises the performance of duties by the Exchange’s governors and senior officers. By the end of 2020, ZCE had 164 members, of which 149 or 91% were FB members and 15 or 9% non-FB members.

As at the end of 2020, 22 futures products, including common wheat, strong gluten wheat, early long-grain non-glutinous paddy , late long-grain non-glutinous paddy, medium to short- grain non-glutinous paddy, cotton, cotton yarn, rapeseed, rapeseed oil, rapeseed meal, white sugar, apple, Chinese jujube, thermal coal, methanol, purified terephthalic acid (PTA) , glass, ferrosilicon, manganese silicon, urea, soda ash, polyester staple fiber and 6 options, including white sugar options, cotton options, purified terephthalic acid (PTA) options, methanol options, rapeseed meal options and thermal coal options were listed on ZCE, covering a multiple of significant sectors of the national economy, including grain, cotton, oil, sugar, fruit, energy, chemical engineering, textile, metallurgy, and building materials sectors, as set out in Table 1:

Table 1: Products Listed on ZCE

Category		Name
Futures	Agriculture	common wheat, strong gluten wheat, early long-grain non-glutinous paddy, late long-grain non-glutinous paddy, medium to short-grain non-glutinous paddy, cotton, cotton yarn, rapeseed, rapeseed oil, rapeseed meal, white sugar, apple, Chinese jujube
	Non-Agriculture	thermal coal, methanol, purified terephthalic acid (PTA), glass, ferrosilicon, manganese silicon, urea, soda ash, polyester staple fiber
Options	white sugar options, cotton options, purified terephthalic acid (PTA) options, methanol options, rapeseed meal options and thermal coal options	

In 2020, ZCE registered an annual trading volume of 1.70 billion contracts (based on round turn trades, same below) and an annual turnover of RMB 60.09 trillion. For futures, a trading volume of 1.66 billion contracts, and a turnover of RMB 60.06 trillion. For options, a trading volume of 40.14 million contracts, and a turnover of RMB 23.62 billion.

ZCE has an internal and separate clearing department responsible for centrally clearing the trading and delivery of futures and options, managing margin and collateral, and controlling

settlement risk.

ZCE conduct clearing for all members. The futures brokerage members shall conduct clearing for their clients and overseas brokers, and overseas brokers shall conduct clearing for their clients.

ZCE implements a margin requirement system, ZCE has formulated the *Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange, Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange* and other related supervisory measures in accordance with the *Bylaws of Zhengzhou Commodity Exchange* and *Trading Rules of Zhengzhou Commodity Exchange* to determine the methods and scope for enforcement of the margin requirement system and assess the effectiveness and security of the margin requirement system.

Margin is classified into clearing reserve fund and trading margin. Clearing reserve fund is the funds deposited in advance by a member in the special clearing account of the Exchange and is the portion of the margin not being used to maintain existing positions. Trading margin is the funds deposited by a member into the special clearing account of the Exchange to ensure performance and is the portion of margin being used to maintain existing positions.

After a trade is executed by the trading parties, the Exchange will collect trading margin according to the value of the open contract and the prescribed trading margin rate. The level of trading margin for each futures contract and at different trading periods are subject to the applicable rules of the Exchange. Members are allowed to pledge highly liquid assets with stable value for margin, such as registered receipts, foreign exchange or treasury bonds.

ZCE opens a special clearing account at a futures margin depository bank (“depository bank”) for depositing the margin and other relevant funds of members; a member must open a special fund account at a depository bank for depositing margin and other relevant funds. Transfer of funds between the Exchange and a member for futures trading is made between the special clearing account and the special fund account. ZCE, depository banks and members maintain the segregation of futures margin in accordance with applicable rules.

ZCE implements a daily mark-to-market system. After the close of market each day, the Exchange will clear the profit or loss, trading margin, transaction fees, and other expenses for all contracts held by each member at the daily settlement price and then make a single transfer of the netted receivables and payables by crediting or debiting the member’s clearing reserve fund accordingly.

Upon the completion of daily clearing, the clearing results will be sent to clearing members. The clearing results are deemed as the Exchange’s margin call to any member whose clearing reserve fund is below the minimum balance required by the Exchange. After issuing the margin call, the Exchange may have the member’s clearing reserve fund replenished by deducting the required amount in RMB from

the member's special fund account or by deducting the RMB converted from the foreign exchange collateral deposited in the member's special fund account. The member must bring its clearing reserve fund to the required minimum balance before market open on the following trading day. If the member fails to do so, the member will be prohibited from opening new positions when the balance of its clearing reserve fund is above zero but below the minimum requirement; or the Exchange is entitled to subject the member's positions to forced liquidation when the balance of clearing reserve fund is below zero. If proceeds from such forced liquidation are not adequate to cover the loss, the Exchange will, upon the approval of the Board of Governors, apply the risk reserve fund and ZCE's own assets and other measures in order to cover the loss and consequently obtain the right of recourse against the defaulting member.

ZCE implements risk reverse fund system. The risk reserve fund refers to the fund established by the Exchange to ensure normal operation of the futures market and to make up any loss caused by risks beyond the control of the Exchange.

ZCE has fully-functional electronic systems for trading, delivery, clearing, risk monitoring, information dissemination, member services, etc. Members and clients may engage in futures trading through a remote trading system. Market data on futures trading are concurrently distributed in and outside China through multiple quotation systems, including, among others, Reuters, Bloomberg, and Shihua International Financial Information Co., Ltd

(II) Organization and Governance Structure

ZCE operates as a membership-based exchange in accordance with the *Measures for the Administration of Futures Exchanges*, *Bylaws of Zhengzhou Commodity Exchange* and other applicable rules.

1. General Assembly

The General Assembly, composed of all members, is the supreme governing body of the Exchange. The General Assembly exercises the powers, among others, to: deliberate and approve the Exchange's *Bylaws* and *Trading Rules* and their draft amendments; elect and replace member governors and member supervisors; deliberate and approve reports on the work of the Board of Governors, Board of Supervisors and President.

2. Board of Governors and its specialized committees

The Board of Governors, composed of 17 members, is the standing body of the General Assembly. With one Board Chairman and one or two Vice Board Chairmen, the Board of Governors exercises the powers, among others, to: convene and report to the General Assembly; draw up the Exchange's *Bylaws* and *Trading Rules* and their draft amendments and submit them to the General Assembly for deliberation and approval; deliberate the financial budget plans and final account reports presented by the President and submit them to the

General Assembly for approval.

The Board of Governors has the Strategic Advisory Committee and specialized committees including the Products Committee, Trading Committee, Supervision Committee, Self-Disciplinary Committee, IT Committee, Finance & Audit Committee, and Risk Management Committee. The Strategic Advisory Committee has representatives of the Exchange's members, industry and subject matters experts, and representative scholars from universities and colleges and research institutions as its members and the Board Chairman as its chairman. Each committee is accountable to the Board of Governors by carrying out its work within the prescribed scope of duty and has the same term of office as the Board of Governors. The employment or appointment of members of each committee is decided by the Board of Governors upon being nominated by the Board Chairman.

3. Board of Supervisors

The Board of Supervisors, composed of no less than 5 supervisors, is the supervisory body of the Exchange. With one Chief Supervisor, the Board of Supervisors exercises the powers, among others, to: examine the financial affairs of the Exchange; supervise the performance of duties by the Exchange's governors and senior officers; if a governor or senior officer commits acts which damage the interests of the Exchange, require the governor or senior officer to make corrections; and submit proposals to the General Assembly.

4. Day-to-day management

The Exchange has one President who is responsible for the day-to-day management of the Exchange and several Vice Presidents who provide assistance to the President. In addition to its 20 functional departments, including the Executive Office, the CPC Committee Office (Office of the Board of Governors and Office of the Board of Supervisors), Agricultural Products Department, Non-agricultural Products Department, Futures Derivatives Department, Market Service Department, Member Service Department, Trading Department, Clearing Department, Delivery Department, Market Surveillance Department, System Operation and Development Department, Legal & Compliance Department, Media Information Department, International Cooperation Department (Office of Hong Kong, Macao and Taiwan Affairs), Human Resource Department (CPC Committee Organization Department), Finance Department, Administrative Department (Security and Safeguard Department), Internal Audit Department, and Disciplinary Office, ZCE has three branches, including Beijing S&D Center, Shanghai Service and Development Center, Urumqi Service and Development Center, and one foreign agency, Singapore Representative Office, and four subsidiaries, including Zhengzhou Esunny Information Technology Co., Ltd, ZCE Futures and Derivatives Research Institute Co., Ltd., Zhengzhou Future Hotel Co., Ltd., and Zhengzhou Future Commercial Operations Co., Ltd.

(III) Legal and Regulatory Framework

ZCE, a membership-based legal person established with the approval of the CSRC and in accordance with the *Regulation on the Administration of Futures Trading, Measures for the Administration of Futures Exchanges* and other applicable regulations, is subject to the centralized supervision and administration of the CSRC.

Under the supervision and administration of the CSRC, ZCE organizes futures trading and provides venues, facilities and clearing, delivery, information dissemination and other services for futures trading on a fair, just, open and good faith basis.

ZCE had carried out its CCP clearing business under the laws of China only. All business activities of ZCE have a well-founded, clear, transparent, and enforceable legal basis, mainly including: the *General Provisions of the Civil Law of the People's Republic of China, Contract Law of the People's Republic of China, Guaranty Law of the People's Republic of China, and Property Law of the People's Republic of China*¹ and other laws; futures-related regulations such as the *Regulations on the Administration of Futures Trading* promulgated by the State Council and the *Measures for the Administration of Futures Exchanges* and *Measures for the Supervision and Administration of Futures Brokerages* released by the CSRC; and other relevant judicial interpretations.

ZCE has established a complete framework of rules governing operation of trading and management of the market in accordance with applicable laws and regulations to set forth detailed provisions on trading, clearing, delivery, member management, risk control, receipts management, enforcement against violations, and other aspects of the futures market.

Market access: The main legal basis for market access includes the *Regulation on the Administration of Futures Trading*, *Measures for the Supervision and Administration of Futures Brokerages*, *Bylaws of Zhengzhou Commodity Exchange*, and *Measures for the Administration of Memberships of Zhengzhou Commodity Exchange*, which mainly set out, among others, eligibility requirements for applicants intending to establish a futures brokerage, approval process for establishment of futures brokerages; eligibility requirements for applicants applying to be admitted as a ZCE member, rights and obligations of ZCE members; market participants.

Contracts: The main legal basis for regulation of futures contracts includes the *Regulation on the Administration of Futures Trading, Measures for the Administration of Futures Exchanges, Bylaws of Zhengzhou Commodity Exchange, and Trading Rules of Zhengzhou Commodity Exchange*, which set out the responsibilities to be assumed and appropriate approval processes to be underwent by the Exchange during the design, listing, amendment, and termination of contracts.

¹ As of January 1, 2021, the *General Provisions of the Civil Law of the People's Republic of China, Contract Law of the People's Republic of China, Guaranty Law of the People's Republic of China, and Property Law of the People's Republic of China* shall be repealed and replaced by *The Civil Code of the People's Republic of China*.

Trading: ZCE has formulated the Detailed Rules for Futures Trading of Zhengzhou Commodity Exchange in accordance with the applicable laws, regulations and policies of China and the Bylaws of Zhengzhou Commodity Exchange and Trading Rules of Zhengzhou Commodity Exchange to explicitly provide for members' seats, remote trading, trading code, price, information disclosure, and others.

Clearing: ZCE has formulated the *Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange* in accordance with the applicable laws, regulations and policies of China and the *Bylaws of Zhengzhou Commodity Exchange and Trading Rules of Zhengzhou Commodity Exchange*. ZCE implements margin requirement, mark-to-market, risk reserve fund and other systems for the operation of its futures clearing business. Under the all-member clearing system enforced by ZCE, the Exchange conducts clearing for all members, FB members for their clients and overseas brokers, and overseas brokers for their clients.

Delivery: ZCE has, in accordance with the applicable laws, regulations and policies of China and the *Bylaws of Zhengzhou Commodity Exchange and Trading Rules of Zhengzhou Commodity Exchange*, formulated the *Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange*, *Measures for the Administration of Designated Delivery Warehouses of Zhengzhou Commodity Exchange*, *Measures for the Administration of Designated Factory Warehouse of Zhengzhou Commodity Exchange*, *Measures for the Administration of Registered Receipts of Zhengzhou Commodity Exchange* and *Detailed Rules for Implementation of Bonded Delivery of Zhengzhou Commodity Exchange* to regulate all futures delivery activities.

Risks and responsibilities: ZCE has formulated the *Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange* in accordance the applicable laws, regulations and policies of China and the *Bylaws of Zhengzhou Commodity Exchange and Trading Rules of Zhengzhou Commodity Exchange*. ZCE implement margin requirement, price limit, position limit, large position reporting, forced liquidation and risk warning systems for the management of risks in futures trading.

Supervision and enforcement: ZCE has, in accordance with the applicable laws, regulations and policies of China and the *Bylaws of Zhengzhou Commodity Exchange and Trading Rules of Zhengzhou Commodity Exchange*, formulated the *Measures for Penalties for Violations of Zhengzhou Commodity Exchange* to enhance the administration of the futures market, regulate futures trading activities and protect the legitimate rights and interests of futures market participants. A violation refers to the violation of the *Bylaws*, *Trading Rules* or any other applicable requirements of the Exchange by members, overseas brokers, market makers, clients, delivery warehouses (factories), designated futures margin depository banks, quality inspection agencies, information service providers or other futures market participants and their employees. The Exchange will, on a fair and just basis and according to the facts involved, investigate into, determine and impose disciplinary actions against violations. Any violation which constitutes

a criminal offense will be turned over to the judicial authority for legal investigation of criminal liability.

Contingency measures: Under the *Trading Rules of Zhengzhou Commodity Exchange*, ZCE may declare the occurrence of an abnormality and take contingency measures to resolve risks if the trading is interrupted due to reasons unattributable to the Exchange such as earthquake, flood, fire and other force majeure events or computer system failure, or if the clearing or delivery risk of a member is having or will have a material impact on the market.

Contingency measures available to ZCE include: adjusting the time of market open and close, suspending trading, adjusting price limits, adjusting trading margin requirements, suspending the opening of new positions, requiring the close-out of positions within a specified time limit, implementing forced position liquidation, restricting withdrawal of funds, and conducting forced position reduction.

(IV) System Design and Operation

Systems involved in the clearing business of ZCE mainly include: clearing business management system, real-time calculation system, bank-futures fund transfer system, and member service system, which are set out as follows in detail:

Clearing business management system: It is mainly used to support core businesses such as trading clearing, delivery clearing and registered receipts management, and has such functions as configuration, initiation, execution and reporting of such businesses. The system implements daily mark-to-market by clearing the profit or loss, trading margin, transaction fees, and other expenses for all contracts held by each member at the daily settlement price and then making a single transfer of the netted receivables and payables by crediting or debiting the member's clearing reserve fund accordingly. In addition, the system provides data and information on settlement price, open interest, clearing parameters and transaction fees to members each day and supports funds deposit and withdrawal management, collateral management, physical delivery and other businesses to ensure the normal operation of the clearing business.

Real-time calculation system: The system can improve the Exchange's ability to manage the members' capital risk by timely monitoring the members' interests, profit or loss, and potential capital pressure. The system mainly includes two parts, i.e. intraday real-time calculation and simulated calculation. The Exchange's personnel can conduct intraday real-time calculation through the system to dynamically assess capital risks of members and the whole market; and can establish simulated scenarios and assess capital risks under such simulated scenarios. For the management of option exercise risk, the Exchange's personnel can identify any potential exercise risk by calculating the balance of funds of a member as the time of exercise approaches to ensure the sound operation of the option-related business.

Bank-futures fund transfer system: The system is an electronic fund transfer platform that connects the Exchange, members and designated depository banks. Allowing for the deposit or withdrawal of funds by members and monitoring of funds, etc., and with a secure and efficient data transmission mechanism and a highly scalable Exchange-bank fund transfer communication protocol in place, the system effectively reduces the operating costs of the Exchanges, members and banks and improves funds flow efficiency and the Exchange’s ability to exercise real-time monitoring of funds.

Member service system: The system is a comprehensive business platform among the Exchange, members, designated delivery warehouses (or factories), and quality inspection agencies. Through the system, configurability of the business process, rapid response to process change and visualization of complex process progress are realized. In addition, it also provides the functions of self-customized key business review, business search and positioning, and one-click direct access to to-do business and important notice. It electronically manages businesses such as the management of load-in intentions, receipt registration, receipt cancellation, receipt transfer, pledging receipt for margin, and pledging receipt as margin, and assets as margin, applications for product inspection, and notification of inspection results.

IV. Principle-by-principle Summary Narrative Disclosure

This part provides the principle-by-principle summary narrative disclosure of ZCE.

Principle 1: Legal basis	
An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.	
Key consideration1: The legal basis should provide a high degree of certainty for each material aspect of an FMI’s activities in all relevant jurisdictions.	ZCE engages in CCP clearing business in accordance with the laws of China and under the centralized supervision and administration of the CSRC. All business activities of ZCE have a well-founded, clear, transparent, and enforceable legal basis, mainly including: (1) the <i>General Provisions of the Civil Law of the People’s Republic of China, Contract Law of the People’s Republic of China, Guaranty Law of the People’s Republic of China, and Property Law of the People’s Republic of China</i> and other laws; (2) the <i>Regulation on the Administration of Futures Trading</i> and other administrative regulations promulgated by the State Council; (3) the <i>Measures for the Administration of Futures Exchanges, Measures for the Supervision and Administration of Futures Brokerages, Interim Measures for the Administration of Overseas Trading Participants’ and Overseas Brokerage Institutions’ Engagement in Trading of</i>

	<p><i>Domestic Specified Futures Products</i> and other ministry-level rules released by the CSRC; and (4) the <i>Provisions of the Supreme People’s Court on Several Issues Concerning the Trial of Futures Dispute Cases</i> and <i>Provisions of the Supreme People’s Court on Several Issues Concerning the Trial of Futures Dispute Cases (II)</i> and other relevant judicial interpretations. In practice, the foregoing laws and regulations have all been well enforced and complied with.</p> <p>The legal basis for ZCE to operate as a CCP is the general assignment of rights and obligations under the <i>Contract Law of the People’s Republic of China</i>. Article 88 of the <i>Contract Law of the People’s Republic of China</i> which sets forth the general assignment of rights and obligations provides that “A party to a contract may, upon the consent of the other party thereto, transfer its rights together with its obligations thereunder to a third party”. This mechanism enables ZCE to, acting as a CCP, interpose itself between the parties to futures or options contracts to become the buyer to every seller and the seller to every buyer, thereby ensuring the performance of each contract. The rights and obligations of the parties under the contracts are novated to ZCE as a CCP between the parties, and this succession of rights and obligations has a certain legal effect. In addition, ZCE’s capacity as a CCP is clearly provided in Articles 10 and 33 of the <i>Regulation on the Administration of Futures Trading</i> and Article 15 of the <i>Interim Measures on the Administration of Overseas Trading Participants’ and Overseas Brokerage Institutions’ Engagement in Trading of Domestic Specified Futures Products</i>.</p> <p>Enforceability of the netting arrangement. The right of set-off provided under the <i>Contract Law of the People’s Republic of China</i>, and the mark-to-market system implemented in futures trading give legal support for the netting arrangement. Article 99 (1) of the <i>Contract Law of the People’s Republic of China</i> provides that “Where each party owes debt obligations to the other party that are due, and the subject matters of the obligations are identical in type and quality, then either party may set off its obligations against those of the other party except where set-off is prohibited by law or by the nature of the contract.” Article 100 thereof provides that,</p>
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“Where each party owes debt obligations to the other party that are due, and the subject matters of the obligations are not identical in type and quality, the parties may effect set-off by mutual agreement.” The said two articles respectively provide the legal basis for netting arrangement for products of the same type and different types.

Article 33 of the *Regulation on the Administration of Futures Trading* requires a futures exchange to daily mark to market and specifies that futures trades shall be cleared on a netting basis. The *Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange* also contains specific provisions on netting arrangement.

Collateral arrangement. The margin arrangement of ZCE is in the form of pledge of rights. Under the margin arrangement, currencies and pledgeable assets such as receipts and treasury bonds, can be used as pledged collateral upon being approved. Article 85 of the *Interpretation of the Supreme People’s Court on Several Issues Concerning the Application of the Guaranty Law of the People’s Republic of China* which prescribes that “Where the debtor or a third party transfers the possession of its special account, sealed money, deposit, or other forms of funds, in each case of an amount certain, to the creditor as performance guarantee, said creditor shall be given priority in receiving payment with such amount if said debtor defaults”, provides the legal basis for the acceptance of currencies as futures margin.

Pursuant to Article 223 of the *Property Law of the People’s Republic of China*, a debtor is entitled to create a pledge by pledging receipts, bonds, and other rights. This provision provides the legal basis for the acceptance of non-currencies such as registered receipts, treasury bonds and other documents of title for margin.

In addition, Article 81 of the *Regulation on the Administration of Futures Trading* stipulates that “‘Margin’ means funds paid or registered receipts, treasury bonds and other marketable securities with stable value and high liquidity submitted by futures traders as required”, providing the explicit basis at the regulation level for ZCE’s margin arrangement.

Default handling. Article 107 of the *Contract Law of the People's Republic of China* states that “Either party that fails to perform its obligations under the contract or fails to perform them as agreed shall bear the liability for breach of contract by continuing to perform the obligations, taking remedial measures, or compensating for losses.”

Article 36 of the *Regulation on the Administration of Futures Trading* provides that “Where any member commits a default in futures trading, a futures exchange shall first hold the member liable for such default with the member's margin, and if the margin is not sufficient, shall then use its risk reserve fund and own funds to bear the liability for such default on the behalf of the member and consequently obtain the right of recourse against the member.”

The *Trading Rules of Zhengzhou Commodity Exchange* also contains provisions on the default handling rules and the cascade process, under which if a clearing participant is unable to perform its obligations, ZCE may ensure the performance thereof by taking such measures as suspending the opening of new positions, forcing liquidation of positions, legally disposing of secured assets, applying the proceeds from the transfer of the participant's membership and its other funds, or using the risk reserve fund or ZCE's own funds.

Settlement finality. Article 33 of the *Regulation on the Administration of Futures Trading* provides that “A futures exchange shall implement daily mark-to-market and shall timely inform its members of the clearing results for their transactions on the day of the transactions. A futures brokerage shall clear for clients according to the clearing results of the futures exchange and shall timely inform them of the clearing results in the manner they have agreed upon.”

Article 37 of the *Measures for the Supervision and Administration of Futures Brokerage* provides that “In the event of dissolution or bankruptcy, a futures brokerage shall first properly handle clients' assets and settle its futures businesses”; Article 68 thereof stipulates that “A futures brokerage shall provide transaction clearing reports to clients after the end of the daily trading session and remind them of the availability of such reports through the futures margin

depository organization. The clients shall confirm the transaction clearing reports in accordance with such method as agreed in the futures brokerage contract.”

Pursuant to Article 68 of the *Measures for the Administration of Futures Exchanges*, “The margin which a futures exchange collects from members shall only be used to secure the performance of futures contracts and may not be seized, frozen, levied, or enforced.”

According to Article 27 of the *Provisions of the Supreme People’s Court on Several Issues Concerning the Trial of Futures Dispute Cases*, “The client’s confirmation of the clearing results of a given day’s transactions shall be deemed as a confirmation of any and all of the position and transaction clearing results prior to that date; any consequences arising from the confirmation shall be solely assumed by the client.”

Additionally, according to relevant provisions of the *Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange*, when ZCE organizes futures trading, the legal nature of such actions or assets as executed trading orders, collected margin, transferred or pledged assets used as margin will not be avoided or invalidated due to the member concerned enters bankruptcy proceedings; if the member is in bankruptcy proceedings, ZCE may continue to clear the open contracts of that member in accordance with its *Trading Rules* and their detailed rules. The foregoing regulations, ministry- level rules, judicial interpretations, and self-regulatory rules provide the legal basis for settlement finality.

Margin segregation. Firstly, margin assets are segregated in the form of guarantee. Article 109 of the *Enterprise Bankruptcy Law of the People’s Republic of China* prescribes that when a party who has provided margin assets to its creditor as security, the creditor as the security interest holder shall have priority in being repaid with such margin assets. In addition, the margin requirement system of ZCE complies with the conditions for creation of security set forth in Article 85 of the *Interpretation of the Supreme People’s Court on Several Issues Concerning the Application of the Guaranty Law of the People’s Republic of China*, i.e. transfer of the possession of and crystallization of collateral. Furthermore, Article 28 of the

	<p><i>Regulation on the Administration of Futures Trading</i> provides that margin collected by a futures exchange shall be deposited in a separate account and segregated from its own funds and shall be prohibited from being used for any purpose other than for clearing the trades of its members; and margin collected by a futures brokerage from its clients shall be deposited in a separate account and segregated from its own funds and shall be prohibited from being used for any purpose other than those specified in the <i>Regulation</i>. The <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> also contains provisions regarding segregation of margin assets. In view of the above, margin segregation has a solid legal basis under the laws of China.</p> <p>Prompt disposal of margin assets. Pursuant to Article 219 (2) <i>Property Law of the People’s Republic of China</i> and Article 71(2) of the <i>Guaranty Law of the People’s Republic of China</i>, where a member meets, as agreed, the conditions for the enforcement of the pledged properties, ZCE is entitled to a corresponding portion of the margin assets in accordance with the agreement with the member, or to have priority in being repaid with the proceeds from auction and sale of the pledged properties. The <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> also provides that if assets used as margin are insufficient to fully and timely cover such margin and any related obligations, ZCE shall be entitled to encash or realize such assets based on the market price to cover such margin and related obligations.</p>
<p>Key consideration2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.</p>	<p>ZCE uses clear, understandable, and concise language to develop or amend its rules, procedures, and contracts. The rules, procedures, and contracts as developed or amended by ZCE are made publicly available on its official website and are accessible to all participants via the Internet.</p> <p>ZCE develops or amends its rules, procedures, and contracts in accordance with the existing legal framework. During the development of or any amendment to rules, procedures, and contracts, ZCE solicits advice and suggestions from a wide range of stakeholders, conducts discussions and assessments of legal issues relating to its business, and has its Legal & Compliance Department review the legality of details of such rules, procedures and</p>

	<p>contracts, so as to ensure that they are consistent with and have no conflict with applicable laws, regulations, and ministry-level rules. Moreover, ZCE, in accordance with the <i>Anti-Monopoly Law of the People's Republic of China</i> and its complementary rules, conducts a fair competition review on any rules or procedures proposed to be developed or amended, in order to not inadvertently preclude or stifle competition.</p> <p>Pursuant to Articles 92, 93 and 94 of the <i>Measures for the Administration of Futures Exchanges</i>, amendments to the <i>Bylaws</i> and <i>Trading Rules</i> of ZCE shall be drafted by the Board of Governors, deliberated and approved by the General Assembly comprising all clearing participants, and submitted to the CSRC for approval. Contracts and detailed rules as developed or amended by ZCE shall be reported in advance to the CSRC and deliberated and approved by the Board of Governors.</p>
<p>Key consideration3: 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.</p>	<p>ZCE has in place a complete system of clear and understandable rules and is able to articulate to regulators, clearing participants, and their clients the legal basis for its various business activities.</p> <p>Rules, procedures, and contracts as developed or amended by ZCE are required to be submitted to the CSRC for approval or reported in advance to the CSRC. At the same time, ZCE has to provide the details of such development or amendment such as the background, reasons, main contents, assessment of implementation effect, solicitation of comments from market participants, and conclusion of legality and compliance review.</p> <p>ZCE publicly discloses its updated rules, procedures, and contracts on its official websites and explains the legal basis for its business rules and procedures through business Q&As, practice notes, training courses, discussion meetings, or other methods to enable clearing participants and their clients to understand them.</p>

<p>Key consideration4: 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.</p>	<p>The rules, procedures, and contracts of ZCE have been developed in strict accordance with the laws, administrative regulations, ministry-level rules, judicial interpretations, etc. of China and approved by or reported to the CSRC before their development or amendment. Thus, they are enforceable in the jurisdiction of China. ZCE can ensure that there is a high degree of certainty that its rules, procedures, and contracts will not be voided, reversed, or subject to stays. To date, none of actions taken by ZCE under its own rules and procedures have been ruled by any court to be unenforceable.</p>
<p>Key consideration5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.</p>	<p>ZCE has not conducted business in multiple jurisdictions as it currently only engages in CCP clearing business under the laws of China. Furthermore, according to the <i>Interim Measures on the Administration of Overseas Trading Participants' and Overseas Brokerage Institutions' Engagement in Trading of Domestic Specified Futures Products</i> and rules of ZCE, when participating in trading of specified products on ZCE, overseas brokers and overseas trading participants must comply with the business rules of ZCE and be subject to the laws of China.</p>

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.

<p>Key consideration1: 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.</p>	<p>ZCE places a high priority on the safety and efficiency of the market and explicitly support financial stability and other relevant public interest considerations.</p> <p>ZCE’s long-term objective is to develop itself into “an industry-leading risk management platform and world-renowned commodity pricing center” by the middle of this century. ZCE is regulated by the CSRC. ZCE is specifically required in its bylaws and business rules to ensure the normal operation of futures trading and protect the legitimate rights and interests of trading parties and the public interest. In addition, according to relevant provisions of the <i>Regulation on the Administration of Futures Trading</i>, ZCE is a not-for-profit institution, which means that its objective is to protect the public interest.</p>
<p>Key consideration2: 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,</p>	<p>ZCE has in place a compliant governance structure and documented governance arrangements in accordance with the <i>Regulation on the Administration of Futures Trading</i> and <i>Measures for the Administration of Futures Exchanges</i>. Such governance arrangements are disclosed to the public through ZCE’s official website.</p> <p>As a self-regulatory legal person, ZCE has established a governance structure which comprises the General Assembly, Board of Governors, management team, and Board of Supervisors. The General Assembly, the supreme governing body of ZCE, is composed of all members. ZCE also has the Board of Governors and the Board of Supervisors. Under the Board of Governors, there</p>

<p>participants, and, at a more general level, the public.</p>	<p>is one President who is responsible for its day-to-day management.</p> <p>In its day-to-day work, ZCE is obliged to submit reports to the CSRC to ensure the legality and compliance of its operation and the safety and stability of the futures market. For example, the Exchange submits the annual financial report, audited by an accounting firm licensed to provide securities and futures-related services, within four months after the end of each year; submits quarterly and annual reports on the business operations and the implementation of laws, administrative regulations, ministry-level rules, and policies within 15 days after the end of each quarter or 30 days after the end of each year, as appropriate.</p>
<p>Key consideration3: 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.</p>	<p>ZCE's <i>Bylaws</i> clearly specifies the powers of the Board of Governors and supervisory powers of the Board of Supervisors. The performance of relevant duties by the General Assembly, the Board of Governors, and Board of Supervisors has all been documented.</p> <p>The Exchange has the General Assembly composed of all its members. The General Assembly elects and replaces member governors and member supervisors. Under the General Assembly, the Exchange has the Board of Governors.</p> <p>Pursuant to ZCE's <i>Bylaws</i>, the Board of Governors exercises the powers to: (1) convene and report to the General Assembly; (2) draw up the Exchange's <i>Bylaws</i> and <i>Trading Rules</i> and their draft amendments and submit them to the General Assembly for deliberation and approval; (3) deliberate the financial budget plans and final account reports presented by the President and submit them to the General Assembly for approval; (4) deliberate a plan for the Exchange's combination, split-up, change of organization form, increase or decrease in registered capital, dissolution or liquidation and submit it to the General Assembly for approval; (5) determine the setup and composition of specialized committees and the Strategic Advisory Committee; (6) make a decision on the admission and withdrawal of members, foreign traders directly trading on the Exchange, and foreign brokers; (7) make a decision on the imposition of disciplinary actions for violations; (8) make a decision on any change in the name, domicile, and place of business of the Exchange; (9) deliberate and approve detailed rules and</p>

	<p>measures made under the <i>Bylaws</i> and <i>Trading Rules</i>; (10) deliberate and approve the plans for use of the risk reserve fund and specific-purpose (risk) reserve fund; (11) deliberate and approve the Exchange's development plans and annual work plans proposed by the President; (12) deliberate and approve the Exchange's external investment plans; (13) make a decision on the engagement and change of an accounting firm; (14) make a decision on the ways in which the General Assembly is held; and (15) do other things as authorized under laws, regulations, ministry-level rules and the <i>Bylaws of Zhengzhou Commodity Exchange</i> and by the General Assembly.</p> <p>The Board of Governors has, as necessary for its own needs, set up several specialized committees and the Strategic Advisory Committee. The specialized committees provide assistance to the Board of Governors in its exercise of powers and is accountable to and has its duties determined by the Board of Governors. Members of specialized committees and the Strategic Advisory Committee are appointed by the Board of Governors.</p> <p>(1) Strategic Advisory Committee. Main duty: give advice and suggestions on the preparation and improvement of the Exchange's development strategies and plans; the market development and self-regulation of the Exchange, considering, among other factors, national policies, economic situation, market operation; and other relevant issues for which the Board of Governors or management team seeks its advice.</p> <p>(2) Products Committee. Main duty: give advice and suggestions on the research and development of futures and options products and the introduction of new business, the design and modification of futures and options contracts and rules related thereto, and the market development, product cultivation, enterprise training, and investor education; and complete any other work assigned by the Board.</p> <p>(3) Trading Committee. Main duty: give advice and suggestions on the improvement and innovation of futures and options trading and clearing mechanisms, the improvement and innovation of futures delivery mechanism, the development and modification of business rules relating to trading, clearing, and delivery, the management and distribution of delivery warehouses</p>
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	<p>(or factories), and matters related to the management of futures margin depository banks; and complete any other work assigned by the Board of Governors.</p> <p>(4) Supervision Committee. Main duty: give advice and suggestions on the improvement and optimization of market supervision efforts such as the prevention and management of market risks and handling of abnormal trading activities, and the development and modification of business rules relating to market supervision; and complete any other work assigned by the Board.</p> <p>(5) Self-Disciplinary Committee. Main duty: give advice and suggestions on the improvement and optimization of member management, and the development and modification of member management rules; review members' admission or withdrawal applications and issues opinions thereon; give advice on the handling of member violations; mediate futures disputes between members, clients, designated delivery warehouses (or factories) and other futures market participants; and complete any other work assigned by the Board of Governors.</p> <p>(6) IT Committee. Main duty: give advice and suggestions on the planning, development, operation, management, and other aspects of the Exchange's IT systems, the coordinated development of the IT systems of the Exchange and its members and the development of technologies in the futures market, the development of and services from direct access trading, hosting service and member service systems upon the request of members, and the Exchange's implementation of self-regulation over members' IT systems and work; conduct technical exchange activities to keep pace with the latest technology development; and complete any other work assigned by the Board of Governors.</p> <p>(7) Finance and Audit Committee. Main duty: give advice and suggestions on the Exchange's financial and budget management; give advice on the Exchange's draft annual financial budget plans and final accounts, the Exchange's external investment and other material financial matters, the engagement and change of the auditor of the Exchange's annual reports; and complete any other work assigned by the Board of Governors.</p> <p>Risk Management Committee. Main duty: give advice and suggestions on the improvement and optimization of efforts to build</p>
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	<p>a comprehensive risk management framework, the development and modification of rules related to comprehensive risk management, and the strategy and plan for management of material risks; and complete any other work assigned by the Board of Governors. The review of overall performance of the Board of Governors mainly includes: setup of the Board of Governors by the Exchange, deliberation and approval of reports on the work of the Board of Governors by the General Assembly, election of member governors a by the General Assembly and appointment of non-member governors by the CSRC. Currently, the Board of Supervisors oversees governors in their performance of duties to the Exchange and, if a governor's act damages the interests of the Exchange, is entitled to require the governor to make corrections.</p>
<p>Key consideration4: 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).</p>	<p>According to the Exchange's Bylaws, the Board of Governors consists of 17 governors, including ten member governors and seven non-member governors. Member governors are elected by the General Assembly upon being nominated by the Board of Governors or more than one-fifth of the members. Non-member governors are appointed by the CSRC. The Exchange's President is an ex officio governor. Member governors nominated by members can represent the interests of the market participants at large, while CSRC-appointed governors take into account the public interest at a more general level. All members of the Board of Governors possess expertise required for the futures industry. ZCE has no corporate management mechanism for non-executive or independent governors as it is a membership-based exchange.</p>
<p>Key consideration5: 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</p>	<p>In its <i>Bylaws</i>, ZCE clearly specifies the powers of the management team. ZCE has one President who is responsible for its day-to-day management and several Vice Presidents who assist the President in his work. The President and Vice Presidents are appointed and removed by the CSRC.</p> <p>The President exercises the powers to: (1) organize the implementation of rules and resolutions approved by the General Assembly and the Board of Governors; (2) manage the day-to-day affairs of the Exchange; (3) draw up relevant detailed rules and measures in accordance with the <i>Bylaws</i> and <i>Trading Rules</i>; (4) draw up the plans for use of the risk reserve fund and the specific-</p>

<p>risk management of the FMI.</p>	<p>purpose (risk) reserve fund; (5) draw up the Exchange’s development and annual work plans and implement such plans after they are approved; (6) draw up the external investment plans of the Exchange and implement such plans after they are approved; (7) draw up the financial budget plans and final account reports of the Exchange; (8) draw up a plan for the combination, split-up, change of organization form, dissolution or liquidation of the Exchange; (9) draw up a plan for any change in the name, domicile, or place of business of the Exchange; (10) make a decision on the organizational structure plan of and the employment and dismissal of personnel by the Exchange; (11) make a decision on the salaries, rewards, and penalties of the Exchange’s employees; and (12) do any other things as authorized under the <i>Bylaws</i> or by the Board of Governors.</p> <p>If the President is temporarily unable to exercise his powers for any reason, a Vice President designated by him will do so on his behalf. ZCE holds the President’s executive meetings attended by the President, Vice Presidents, and other top officers of the Exchange to make decisions on important matters in the day-to-day operation and management of the Exchange.</p> <p>The General Assembly has the powers to deliberate and approve reports on the work of the President and the financial budget plans and final account reports of the Exchange. The Board of Governors is empowered to: deliberate the financial budget plans and final account reports presented by the President and submit them to the General Assembly for approval; deliberate and approve the Exchange’s development and annual work plans proposed by the President; and deliberate and approve the plans for the use of the risk reserve fund and the specific-purpose (risk) reserve fund, etc. The Board of Supervisors can oversee senior officers in their performance of duties to the Exchange and, if a senior officer’s act damages the interests of the Exchange, is entitled to require the senior officer to make corrections.</p> <p>The foregoing external and internal supervision and review measures strongly ensure that the management team is motivated and able to achieve the objectives of the system.</p>
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<p>Key consideration6: 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.</p> <p>Governance arrangements should ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.</p>	<p>ZCE has established an internal risk prevention and management system, including the Board of Governors, management team, and relevant departments, and specific requirements for operation of such system, and set forth risk management and internal control requirements and responsibility, accountability and decision-making mechanisms.</p> <p>ZCE's Board of Governors has set up the Risk Management Committee which gives advice and suggestions to the Board of Governors on its comprehensive risk management efforts. The duties of the Risk Management Committee include: giving advice and suggestions on the improvement and optimization of efforts to build a comprehensive risk management framework, the development and modification of rules related to comprehensive risk management, and the strategy and plan for management of material risks; and completing any other work assigned by the Board of Governors.</p> <p>To prevent financial market risks, ZCE has released the <i>Measures for the Administration of Futures Trading Risk Control of Zhengzhou Commodity Exchange</i> and specifically implemented, across multiple areas and in multiple methods, such comprehensive risk management rules as margin, price limit, position limit, trading limit, large position reporting, forced position liquidation, and risk warning systems.</p> <p>ZCE has also established the Disciplinary Inspection Office and the Internal Audit Department to independently carry out disciplinary inspection and internal audit work and require relevant departments to rectify any identified problems within a specified time limit, which constitutes an effective check and supervision mechanism.</p>
<p>Key consideration7: 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</p>	<p>ZCE's members may affect its decision-making process through the General Assembly or the Board of Governors. For example, the Board of Governors has the power to deliberate and approve the ZCE's development and annual work plans proposed by the President and detailed rules and measures developed under the rules of the Exchange. The General Assembly has the power to deliberate and approve the Exchange's <i>Bylaws, Trading Rules</i>, and their draft amendments as well as the Exchange's financial budget plans and final account reports. Each year, ZCE also seeks comments from its</p>

<p>participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.</p>	<p>members through surveys and visits, questionnaires, members' meeting, and other methods.</p> <p>All stakeholders or the public may also get to know the development, strategic plan, and other aspects of ZCE by its annual reports and other documents publicly disclosed on its official website.</p>
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<p>Principle 3: Framework for the comprehensive management of risks</p>	
<p>An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.</p>	
<p>Key consideration1: 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.</p>	<p>1. Framework for comprehensive management of risks</p> <p>ZCE bears a wide range of risks arising from internal or external sources. These risks include, among others, legal risk (see Principle 1), credit risk (see Principle 4), liquidity risk (see Principle 7), operational risk (see Principle 17), market risk (see Principle 6), general business risk (see Principle 15), and custody and investment risks (see Principle 16).</p> <p>The Board of Governors has set up the Risk Management Committee and other specialized committees to: assess ZCE's risk management framework, give advice and suggestions on the modification and improvement of such framework, and report the same to the Board of Governors; and timely review risk management policies, procedures and systems in case of any greater volatility of risk intensity or a significant change in market environment. Market practice is fully considered by ZCE in conducting relevant review activities and updating risk management policies. ZCE's market surveillance, trading, clearing, delivery, legal affairs and compliance, products, and other functional departments closely monitor changes in market environment or risks and assess and adjust relevant rules and procedures pursuant to applicable rules.</p>

	<p>For legal risk (see Principle 1), ZCE has internally established a well-developed legal risk assessment mechanism which can effectively manage legal risk.</p> <p>For credit risk (see Principles 4 and 6), ZCE prevents the Exchange from being exposed to credit risk by implementing daily mark to market and issuing margin calls; restricts the maximum daily price fluctuation of contracts by implementing price limit and margin systems and enables the trading margin to effectively cover the daily risk exposure; and effectively manages and control potential risks and resolves risks by implementing such measures as risk warnings and forced position liquidation.</p> <p>For liquidity risk (see Principle 7), ZCE's clearing, funds deposit and withdrawal, and other systems have the function of identifying, measuring, and monitoring the members' asset settlement and funding flows. ZCE identifies, measures, and monitors asset settlement and funding flows through these systems on a daily basis. ZCE has established a prudent and acceptable collateral system and put in place sufficient risk reserve fund and own assets to respond to liquidity demands under stress scenarios.</p> <p>For operational risk (see Principle 17), ZCE manages operational risk by developing detailed and clear business procedures, setting up disaster recovery centers, and developing a contingency plan.</p> <p>For general business risk (see Principle 15), ZCE's financial department periodically identifies general business risk, assesses corresponding internal control system and provides suggestions on resolutions and improvements to such system.</p> <p>For custody and investment risk (see Principle 16), ZCE has developed the <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> to manage depository banks and impose explicit and strict requirements for the qualification and management of depository banks. Currently, all of the 15 depository banks which provide depository services are reputable state-owned large commercial banks, national joint-stock commercial banks or state policy banks. In addition, margin operates within a segregated environment supervised by the China Futures Market Monitoring Center (CFMMC).</p>
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	<p>2. Risk-management rules, procedures, and systems</p> <p>To identify, measure, monitor, and manage a wide range of risks, ZCE has established trading, supervision, clearing, designated delivery warehouse (or factory) management, and other systems to achieve monitoring of trading, open interest, funds, collateral, warehouse receipts, delivery, etc. and to provide effective assistance in the identification and management of various risks.</p> <p>The Market Surveillance Department, which mainly manages trading risk, monitors the real-time open positions of members and clients and collects and analyzes open interest data through the market surveillance system to identify trading risk; and prevents and resolves risks through institutional arrangements. The Clearing Department, which manages clearing risk, exercises management of margin through daily mark-to-market and prevents credit, liquidity, and other risks by monitoring and conducting stress tests on members' funds, collateral and other risks. The Delivery Department tracks and assesses the quantity of the underlying commodity available for delivery in the delivery month through letters of guarantee and by monitoring the quantity and quality of the underlying commodity for delivery to ensure smooth delivery and prevents delivery risk.</p> <p>ZCE has also established a sound internal audit system and set up the Internal Audit Department and Disciplinary Inspection Office which can carry out internal audit and disciplinary inspection over risk management policies, procedures and systems, thereby creating an effective supervision mechanism. Moreover, ZCE actively seeks and listens to advice and suggestions from market participants, experts and scholars and, based on the assessment opinions and revision guidance of regulators regarding the effectiveness of risk-management policies, procedures, and systems, timely assesses and corrects any identified problems.</p>
<p>Key consideration2: An FMI should provide incentives to participants and, where relevant, their</p>	<p>To cause its members and their clients to manage risks, ZCE implements a trading code system and an all-member clearing system. ZCE manages margin in a separate account and sets up a ledger account for each member. Margin collected by a futures brokerage from its clients are the property of the clients and are</p>

<p>customers to manage and contain the risks they pose to the FMI.</p>	<p>prohibited from being used for any other purpose.</p> <p>ZCE provides a range of incentives to participants for control and management of their risks. ZCE grants awards at the end of each year to outstanding members who have effectively managed their risks; and through on-site inspections of members, real-time monitoring of trading, and investigation of violations, imposes disciplinary actions, such as giving warnings, circulating a notice of criticism, issuing a public censure, suspending opening of new positions, implementing forced liquidation, revoking membership, against any detected market participants who have committed violations, and imposes disciplinary actions, such as giving warnings, circulating a notice of criticism, issuing a public censure, suspending delivery business, revoking designated delivery warehouse (factory) status, against any detected delivery warehouses (factories) which have committed violations.</p> <p>ZCE timely publishes trading data, clearing parameters, and other information to the market according to applicable rules and makes applicable laws and regulations, business rules, guidelines for day-to-day business operation, and other information easily available on its official website. ZCE periodically organizes video conferences, discussion meetings, and surveys to listen to advice and suggestions from its members, enabling market participants to have a better understanding of risk management policies, procedures, and systems.</p>
<p>Key consideration3: 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</p>	<p>Currently, participants who are highly associated with ZCE’s risks include members, depository banks, and designated delivery warehouses (factories). ZCE measures and monitors, at different frequencies, risks posed by different market participants, and uses different risk management tools to address such risks.</p> <p>1. Members. ZCE has developed the <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange, Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange, Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>, and other rules. Pursuant to these rules, ZCE conducts on-site inspection and assessment on a periodic or non-periodic basis, establishes</p>

<p>appropriate risk-management tools to address these risks.</p>	<p>corresponding business monitoring systems, monitors the trading and funds of its members and their clients on a real-time basis, measures and identifies credit and liquidity risks from its members and their clients, and controls risks through daily mark-to-market and other systems.</p> <p>2. Depository banks. ZCE has developed the <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> which provides for eligibility requirements for banks applying to qualify as a designated depository bank. ZCE also supervises and manages depository banks; performs an annual inspection of depository banks, or an ad hoc inspection thereof if necessary; has built a “bank-futures fund transfer system” which is directly connected to each depository bank and has enhanced its communication with the CFMMC to effectively measure and monitor credit, liquidity, and operational and other risks from depository banks.</p> <p>3. Designated delivery warehouses (factories). ZCE has developed the <i>Measures for the Administration of Designated Delivery Warehouses of Zhengzhou Commodity Exchange</i> and <i>Measures for the Administration of Designated Factory Warehouses of Zhengzhou Commodity Exchange</i> to regulate futures business of designated delivery warehouses (factories); established a designated delivery warehouse (factory) management system to monitor and measure the business operations of each designated delivery warehouse (factory) on a real-time basis and effectively monitor the storage, delivery, and other risks from designated delivery warehouses (factories).</p> <p>ZCE summarizes its work and listens to advice and suggestions from market participants, experts, and stakeholders each year on a periodic or non-periodic basis; and has the Internal Audit Department and Disciplinary Inspection Office conduct audit and disciplinary inspection and timely rectify and correct any identified problems.</p>
<p>Key consideration4: An FMI should identify scenarios</p>	<p>As a not-for-profit legal person under the centralized administration of the CSRC, ZCE has sufficient and highly liquid assets funded by equity which can support and ensure the sustainability of its</p>

<p>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.</p>	<p>business and are capable of supporting its continuous and sound operation in the event of any general business loss incurred by its CCP clearing business.</p> <p><i>The Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> provides for settlement procedures and safeguards in case of members' failure to perform their obligations under contracts.</p> <p><i>The Contingency Plan of Zhengzhou Commodity Exchange Emergencies in the Futures Market</i> set outs contingency measures for major emergencies. ZCE has a leading group for emergencies responsible for the initiation, implementation, and termination of the Exchange's contingency plan for emergencies.</p> <p>Under the <i>ZCE's Bylaw</i>, the CSRC at its discretion may close down the Exchange. With the approval of the CSRC, ZCE may also be terminated when the General Assembly decides to dissolve the Exchange or the Exchange is combined or divided. The Exchange, upon being terminated, will be liquidated by a liquidation team created for such purpose.</p>
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Principle 4: Credit risk

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

<p>Key consideration1: 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.</p>	<p>ZCE has a set of comprehensive and robust administrative measures designed to manage credit exposures to participants and credit risks arising from its payment, clearing and settlement processes. Specifically, ZCE has done so by:</p> <ol style="list-style-type: none">1. developing a risk management framework of specific business rules and detailed rules such as the <i>Detailed Rules for Futures Trading of Zhengzhou Commodity Exchange, Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange, Measures for Administration of Risk Control of Zhengzhou Commodity Exchange, Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange, and Measures for Penalties for Violations of Zhengzhou Commodity Exchange;</i>2. setting strict criteria for admission of members under which clearing members must have sufficient capital and professionals and IT systems to guarantee their fulfillment of responsibilities as members and must continuously meet the admission requirements. (see Principle 18: Access and Participation Requirements);3. implementing daily mark-to-market in its day-to-day clearing and collecting margin before the opening of new positions. Under the mark-to-market system, ZCE monitors and identifies credit exposures to members on a real-time basis through its real-time calculation system;
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	<p>4. eliminating current credit risk exposures to members by such measures as taking such measures as issuing a margin call or implementing forced liquidation and forced position reduction after daily clearing;</p> <p>5. preventing overdrafts of member by setting the minimum clearing reserve fund requirement and collateral discount rates to control or reduce potential future credit risk exposures;</p> <p>6. setting margin at a level which can cover risks with at least a 99% degree of confidence;</p> <p>7. implementing a risk reserve fund system under which the risk reserve fund of the Exchange is separately accounted for and deposited into a special account and if a member fails to perform its obligations, the Exchange may, if necessary, use the risk reserve fund in accordance with relevant procedures;</p> <p>8. making ZCE-designated depository banks only responsible for deposit of margin of members without assuming clearing functions and risks.</p> <p>ZCE reviews its risk management framework annually. ZCE also reviews its risk management framework when listing new products or when the Exchange deems it necessary to revise detailed rules governing risk management for business development</p>
<p>Key consideration2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-management tools to control these risks.</p>	<p>ZCE effectively identifies the sources of credit risk through monitoring day-to-day trading, delivery, clearing and conducting participant review. The identified sources of credit risk mainly include actual and potential credit risk exposures arising from: the default of one or more members due to increased market fluctuations; the bankruptcy of a designated depository bank; the mismanagement of a designated delivery warehouse (factory); and the improper management or central disposition of collateral.</p> <p>ZCE calculates the margin, profits and losses, and other aspects of funds of members and measures and monitors credit risk exposures to members through its real-time calculation system; uses the real-time calculation system to simulate specific scenarios to measure and detect potential credit risk exposures and assess the credit default risk of members; periodically assesses the basic status of</p>

	<p>eligible collateral and the risk of disposal of collateral; and based on relevant reports and inspection results, keeps track of credit standing and management and operation of designated depository banks and designated delivery warehouses (factories) and timely assesses the Exchange’s actual and potential credit risk exposures to them.</p> <p>ZCE controls the sources of credit risk by implementing daily mark-to-market, position limits, large position reporting, forced liquidation, and other measures; diversifies credit risk exposures to designated depository banks and designated delivery warehouses (factories) by approving multiple designated depository banks and designated delivery warehouses (factories) and other means; and periodically evaluates and validates the effectiveness of the above selected risk management tools.</p>
<p>Key consideration3: 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</p>	<p>Not applicable.</p>

<p>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.</p>	
<p>Key consideration4: 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</p>	<p>The financial resources used by ZCE to cover credit risks include margin, risk reserve fund and specific-purpose (risk) reserve fund. ZCE sets margin at a level which covers the current and potential future exposures to each participant in each business with at least a 99% degree of confidence, and conducts periodic or non-periodic assessments to ensure that it has sufficient financial resources to deal with various risk scenarios.</p> <p>ZCE collects sufficient margin during its day-to-day operation. In addition, ZCE has, based on factors such as the asset nature and market liquidity of collateral, developed prudent collateral discount rates and management standards (see Principle 5) to ensure that potential credit risk exposures are covered with a high degree of confidence.</p> <p>Furthermore, ZCE has set up the risk reserve fund and the specific-purpose (risk) reserve fund to provide financial guarantee for the normal operation of the market and cover losses caused by risks unforeseeable to the Exchange. ZCE currently maintains the risk reserve fund at a high level, the size of which has reached the prescribed upper limit. The financial resources available for ZCE to cover credit risks also include its own assets and future credit support from commercial banks. In addition, through periodic or non-periodic stress tests, ZCE ensures that the risk reserve fund and the specific-purpose (risk) reserve fund can cover the maximum loss caused by the simultaneous default of at least two members.</p> <p>ZCE's Clearing Department assesses, registers, and accounts for the</p>

<p>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.</p>	<p>reasonableness of holdings of margin and other relevant financial resources on each day; and ZCE’s Finance Department registers and accounts for ZCE’s financial resources on a daily basis, prepares a report on the implementation of the financial budget plan at least semiannually, and prepares the budget plan and the final account report at the end of the year to evaluate the reasonableness of holdings of relevant financial resources.</p>
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<p>Key consideration5: 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</p>	<p>ZCE calculates, through its real-time calculation system, the total amount of financial resources required in the event of one or more defaults in simulated extreme but plausible market conditions, and shows the results of the stress tests by comparing such total amount of financial resources with that which has been recorded.</p> <p>When the market displays high volatility, becomes less liquid, or when the size or concentration of positions held by participants increases significantly, etc., ZCE will increase the frequency of stress tests to ensure that risks can be timely controlled under extreme conditions.</p> <p>The relevant departments of ZCE are responsible for regularly reporting the results of stress tests to the management team and in the event of temporary and sudden extreme market conditions, immediately reporting such conditions to the management team. If any loss from a default cannot be covered under stress scenarios, ZCE will utilize the risk reserve fund and other financial resources in accordance with applicable procedures.</p>
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<p>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.</p>	
<p>Key consideration6: 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</p>	<p>When setting margin requirement standards for a product, ZCE will take into account the peak of historical price fluctuations of the product, price determinants and a wide range of foreseeable stresses that occur in extreme but plausible market conditions. ZCE will set the margin at a level which can cover the above risks with a high degree of confidence of over 99%.</p> <p>When conducting the stress test, ZCE, by setting extreme market scenarios, ensures that it has sufficient liquid resources to cover a spectrum of forward-looking stress scenarios in extreme market conditions. ZCE implements price limit rules. When the price fluctuation of a contract of a product hits the specified price limit, a stress test will be performed based on future risks from all contracts for the product covered by the contract. The stress test will estimate</p>

<p>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.</p>	<p>the balance of funds of members if the price limit is triggered on the third consecutive day and accordingly estimate the members' risk exposures.</p> <p>ZCE, through its real-time calculation system, simulates significant fluctuations in trading price, higher margin levels, occurrence of a limit-locked market, and a significant increase in positions to test changes in member's margin requirements; and performs an analysis of such changes based on the movement of historical price, current status of products in the market, macroeconomic policies and possible changes in a future period.</p>
<p>Key consideration7: 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</p>	<p>ZCE has established explicit rules and procedures which fully address any credit losses it may face and effectively address how potentially uncovered credit losses would be allocated. The <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> specifies ZCE is entitled to take the following measures to settle the obligations of a member if the member is unable to fulfill such obligations: (1) using proceeds from the transfer of membership of the defaulting member; (2) using the risk reserve fund of ZCE; (3) using the Exchange's own assets; (4) timely covering any resulting loss through the legal recovery mechanism to prevent any subsequent impact on the market.</p> <p>Also, ZCE may, pursuant to the agreements with designated depository banks, obtain sufficient liquidity support from such banks to prevent proliferation of risks.</p>

<p>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.</p>	
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<p>Principle 5: Collateral</p> <p>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.</p>	
<p>Key consideration 1: An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.</p>	<p>ZCE determines the categories of assets acceptable as margin based on whether they have low credit, liquidity and market risks.</p> <p>Currently, assets acceptable as margin include registered receipts which can be circulated through the Exchange, the book-entry government bonds issued within the territory of the PRC by the Ministry of Finance of the PRC and foreign exchange (US dollars).</p> <p>To reduce credit risks, ZCE implements daily mark-to-market for collateral pledged as margin and makes dynamic adjustments as necessary to the value of assets pledged as margin each day. To control market risks, ZCE sets discount rates for assets pledged as margin. Now, the discount rate is 80% for registered receipts and government bonds and 95% for USD.</p>

	<p>ZCE has the right to: as required by market conditions, make adjustments to the benchmark prices, discount rates, and matching ratios of assets pledged for margin; cancel the upper limits on the amount of assets pledged margin; take measures against such assets according to the forced position liquidation system; and convert into cash or realize, at the market price, assets pledged for margin to cover such margin and any related obligations.</p>
<p>Key consideration2: An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.</p>	<p>The <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> contains detailed provisions on evaluation methods of assets acceptable as margin, establishes prudent evaluation practice, and sets proper discount rates. Pursuant to internal policies and procedures, ZCE is fully entitled to adjust benchmark prices of collaterals and calculated its value as margin based on the assessment of market risks.</p> <p>When registered receipts are pledged as margin, the previous trading day's settlement price of the nearest futures contract the underlying assets of which are covered by the registered receipts is used as the benchmark price to the calculate the value of the registered receipts, and the amount of such margin is not allowed to exceed 80% of the market value of the registered receipts. The discount rate covers the range of price limits of futures prices and substantially price volatility risks of registered receipts.</p> <p>When government bonds are pledged as margin, the net price of the corresponding bonds valued by their custodian agencies is used as benchmark price to the calculate the value of the government bonds, and the amount of such margin is not allowed to exceed 80% of the market value of the government bonds. Such discount rate substantially covers price volatility risks of government bonds.</p> <p>When USD is pledged as margin, ZCE sets the discount rate at 95% by evaluating fluctuations of RMB/USD central parity rates in recent years. Such discount rate substantially covers price volatility risks of USD.</p>

<p>Key consideration3: 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.</p>	<p>Fully considering procyclicality, ZCE reduces the need for procyclical adjustments by setting prudent discount rates and keeping the rates stable for a certain period. Collateral valuation discounts can cover extreme but plausible market stress scenarios. If necessary, the ZCE may make adjustments to the discount rates.</p>
<p>Key consideration4: 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.</p>	<p>The Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange sets an explicit limit on the ratio of the total value of collateral to the amount of trading margin. Where a member pledges collateral for margin, the total amount of such collaterals which is allowed for pledge shall not exceed four (4) times (the “matching ratio”) of the total amount of the actual monetary funds in the special clearing account of the member.</p> <p>ZCE monitors the ratio of a member’s margin pledged with registered receipts, government bonds or foreign exchange to the member’s total margin on a daily basis to assess the member’s risk. Currently, the proportion of margin to ZCE pledged with collateral is relatively small. ZCE only accepts registered receipts, government bonds and foreign exchange and other highly liquid assets as margin, which will have small adverse price effects.</p>
<p>Key consideration5: 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.</p>	<p>Not applicable.</p>

<p>Key consideration6: An FMI should use a collateral management system that is well-designed and operationally flexible.</p>	<p>ZCE’s collateral management system can meet all kinds of business demands, features a range of functions such as mark-to-market, discount rate and total amount control, and is operationally flexible and easy.</p> <p>Members can easily and quickly pledge collateral as margin and make real-time enquiries via ZCE’s member service system terminals. At daily clearing, the collateral management system recalculates the value of collateral based on that day’s benchmark price.</p> <p>ZCE adopts a double check mechanism for the collateral management system to ensure the accurate operation of its collateral business.</p>
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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.

<p>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.</p>	<p>ZCE’s margin requirement system is detailed, has explicit adjustment methods, and is disclosed to market participants and the general public through its official website, media, and market promotion materials, and other means so that the margin requirement system is easily available to market participants when they manage risks by themselves.</p> <p>The <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i> and <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> both provide for the margin requirement system in detail. Specifically, a futures brokerage member (FB member) is required to have a minimum balance of RMB 2 million in its clearing reserve fund, and a non-futures brokerage member (non-FB member) RMB 500,000; trading margin rates are set depending on the product covered by each futures contract and the periods of its lifecycle; during the trading process, an appropriate level of trading margin for a position opened in a futures contract on the current day is collected at its settlement price on the previous trading day; at daily clearing, an appropriate level of trading margin for all positions in the futures contract is collected at its settlement price on the current day; If changes in the price of a futures contract calculated at the settlement price, for four consecutive trading days, reach to three times the prescribed price limit, or for five consecutive trading days, reach three point five times the prescribed price limit, ZCE has the right to raise the margin level up to three times the margin level then applicable to the futures contract; If market risks increase significantly , ZCE has the right to adjust the trading margin level</p>
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	<p>for the said contract; in case that a member or a client holds both long and short positions in the contract month, trading margin is collected for the long or short position; and in case of arbitrage trading, trading margin is collected for the larger of the long and short positions.</p> <p>When designing the margin requirement system, ZCE fully considers the particular attributes of each product and market it serves to have the margin requirement system commensurate with them. For example, the trading margin level is set by considering factors such as the fluctuations of historical price of products listed on ZCE. The measurement of risk exposures is based on potential future risk exposures with at least a 99% degree of confidence. For arbitrage portfolio investments, ZCE grants margin reduction or exemption incentives, e.g., margin is collected only from the larger side in the calendar spread arbitrage and cross-commodity arbitrage portfolios.</p> <p>ZCE will clear the profit or loss, trading margin, transaction fees, and other expenses for all contracts held by each member at the daily settlement price and then make a single transfer of the netted receivables and payables by crediting or debiting the member's clearing reserve fund accordingly. At daily clearing, any portion of the trading margin in excess that of the previous trading day will be debited from the member's clearing reserve fund, or any deficiency in the trading margin compared with that of the previous trading day will be credited to the member's clearing reserve fund. Daily profit will be credited into the member's clearing reserve fund, and daily loss will be debited from the member's clearing reserve fund. All expenses including transaction fees will also be debited from the member's clearing reserve fund. The deposit and withdrawal of funds can be made during trading hours.</p> <p>Upon the completion of daily clearing, the clearing results are deemed as the Exchange's margin call to any member whose clearing reserve fund is below the minimum balance required by the Exchange. The member must bring its clearing reserve fund to the required minimum balance before market open on the following trading day. If the member fails to do so, the member will be prohibited from opening new positions when the balance of its</p>
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	<p>clearing reserve fund is above zero but below the minimum requirement; or the Exchange can subject the member's positions to forced liquidation pursuant to applicable rules when the balance of the clearing reserve fund is below zero.</p> <p>ZCE can, through its real-time calculation system, estimate margin, profit or loss and other aspects of a member under certain market conditions to assess the maximum risk exposures to the member, and if necessary, may increase the frequency of such calculation. In addition, for members who have a high fund utilization rate, ZCE focuses on changes in their balance of funds and positions and in the price of contracts held by them and issues risk warnings when necessary.</p> <p>Determinants of ZCE's credit risk exposures to particular products, portfolios and the market it serves include: market-based circulation of products, their market price fluctuations, supply-demand in the spot market, and quantity available for delivery, and supply and demand of related products, national financial and trade policies, and macro-economic performance of China and foreign countries.</p>
<p>Key consideration2: 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.</p>	<p>ZCE calculates margin by entirely using prices generated from its own system which is a reliable and timely price data source.</p> <p>ZCE ensures that prices for its margin model are sourced from trading data on its contracts in the futures market and the underlying commodities in the spot market, including relevant macro-economic data and product output and consumption data published by the National Bureau of Statistics, industry associations, and international organizations. ZCE calculates trading margin at a fixed percentage based on the previous day's settlement price.</p> <p><i>The Trading Rules of Zhengzhou Commodity Exchange, Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange, and Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> address the calculation of margin for newly-listed contracts and those which have no execution price on a trading day.</p>
<p>Key consideration3: A CCP should adopt</p>	<p>ZCE collects margins at a certain percentage of the value of a futures contract. Its margin model is an EWMA model based on</p>

<p>initial margin models and parameters that are risk-based and generate margin requirements sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future</p>	<p>historical price data of products. Under this model, a reference margin rate is obtained by assigning, in chronological order, corresponding weight to historical price data during a selected sampling period and then using the EWMA method to estimate the price volatility rate with a coverage of at least 99%. This model determines a reference margin level based on the assumptions that the market is effective and the historical data is referenceable. Then, management personnel will determine the ultimate margin level by comprehensively considering other factors.</p> <p>ZCE's margin model mainly considers changes in the price of dominant contracts for each product and when calculating margin, decay factors, moving window duration and other parameters.</p> <p>ZCE's margin requirement system is characterized by: (1) opening of new positions after payment of margin; (2) collection of margin at a fixed percentage; (3) setting of high margin levels; and (4) low frequency of margin adjustment.</p>
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<p>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, <i>procyclical changes</i>.</p>	
<p>Key consideration4: 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</p>	<p>ZCE marks member positions to market to calculate their profit or loss from contracts held by them. It also monitors intraday market price changes and profit or loss of members on a real-time basis and has the authority to issue margin calls to members when necessary. Each member must replenish its margin within the time limit prescribed in the margin call. If its clearing reserve fund is not replenished on time and has a negative balance, ZCE is entitled to subject the member’s positions to forced liquidation. ZCE has the right to collect all receivables from the member’s special fund account at a depository bank without notice to the member.</p>

participants.	
<p>Key consideration5: In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-management systems.</p>	<p>If a member or a client holds both long and short positions in the same contract month, ZCE collects trading margin only for the long or short position; for calendar spread arbitrage involving the simultaneous purchase and sale of different contract months for the same product in the same quantity and in opposite direction and cross-commodity arbitrage involving the simultaneous purchase and sale of contracts for different products in same quantity and in opposite direction, ZCE collects trading margin based on the contract in the arbitrage portfolio for which the trading margin is higher. Margin collected for either of the long and short positions in the same contract can completely hedge against risks as the margin rate and price of the contract applicable to them are the same. Considering that the margin rates and prices of different contracts for the same product are varied, but the trends of their changes are consistent, margin collected for the contract in the portfolio subject to higher trading margin can also hedge against risks. In ZCE-designated cross-commodity arbitrage, the risks of the products must be significantly and reliably correlated.</p> <p>For short or long straddle, trading margin is the sum of the greater of the trading margin of the short call option and the long put option and the premium of the other position. For covered option spread, trading margin is the sum of the premium and the trading margin of the underlying futures contract.</p> <p>ZCE allows no offset or reduction in required margin between products which it and another CCP clears.</p>
<p>Key consideration6: A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily backtesting and at least monthly, and more-frequent where</p>	<p>Currently, ZCE implements a margin requirement system and a price limit system, and margin covers price volatility with at least a 99% degree of confidence. ZCE, on a non-periodic basis, uses historical data to conduct back testing of margin coverage. The actual back testing results have shown that margin collected by ZCE has achieved the targeted confidence degree. ZCE also performs a periodic and non-periodic analysis and assessment of margin loss arising due to price changes and fund loss resulting from extreme risks.</p>

<p>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.</p>	<p>Detailed provisions on the collection of margin are set out in the <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> and <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>.</p>
<p>Key consideration7: A CCP should regularly review and validate its margin system.</p>	<p>ZCE changes and adjusts its margin requirements in accordance with the <i>Measures for the Administration of Futures Exchanges</i>, <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> and <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>.</p> <p>ZCE reviews and validates its margin requirement system on a periodic and non-periodic basis according to holidays, changes in market conditions and other factors. Adjustments to margin requirements are decided by ZCE's management team and filed with the CSRC. In the meantime, adjustments to margin requirements are disclosed to market participants via ZCE's official website and member service system.</p>

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.

<p>Key consideration1: 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.</p>	<p>ZCE has a robust framework to manage liquidity risks from relevant participants. In ZCE’s current business, participants associated with liquidity risks include its members and designated depository banks.</p> <p>The potential sources of liquidity risks identified by ZCE mainly include: (1) shortage of repayment funds resulting from members’ defaults; (2) shortage of funds used by margin depository banks to meet the Exchange’s funds withdrawal and other business needs; (3) failure to realize collateral; and (4) failure of depository banks to timely provide sufficient credit support to the Exchange.</p> <p>The institutional framework of ZCE for managing liquidity risks mainly includes, among others, the <i>Regulation on the Administration of Futures Trading, Measures for the Administration of Futures Exchanges, Measures for the Supervision and Administration of Futures Brokerages</i> as well as the <i>Trading Rules of Zhengzhou Commodity Exchange, Detailed Rules for Futures Trading of Zhengzhou Commodity Exchange, Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange, Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange, Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange, Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange, and Measures for Penalties for Violations of Zhengzhou Commodity Exchange.</i></p> <p>To guard against liquidity risks from members, ZCE conducts ex-ante risk control and management by (1) implementing trade-by-trade risk control rules and allowing no overdraft transactions; (2)</p>
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	<p>having in place an institutional arrangement in which cash, highly liquid registered receipts and foreign exchange funds are accepted as margin; (3) implementing the price limit and position limit systems to ensure that the default of a participant is limited under extreme circumstances.</p> <p>To guard against liquidity risks from depository banks, ZCE has set strict access requirements. ZCE requires all depository banks to be state-owned large commercial banks, national joint-stock commercial banks or state policy banks, and continuously monitors their liquidity, credit, concentration, operational, and other risks. If a member's request for funds withdrawal meets the prescribed requirements, ZCE will, after reviewing and approving such request through the bank- futures fund transfer system, require the depository bank concerned to prioritize the transfer of funds for the member. ZCE evaluates the performance of each depository bank and inspects its liquidity each year.</p>
<p>Key consideration2: 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.</p>	<p>ZCE's trading, clearing, bank-futures fund transfer, real-time calculation, and other systems have the functions of identifying, measuring, and monitoring its asset settlement and funding flows.</p> <p>ZCE uses such tools to identify, measure, and monitor asset settlement and funding flows on an ongoing and timely basis during and after trading hours of each day. ZCE measures funds risk based on market price changes, changes in members' open positions, adjustment of margin rates and by considering member's daily floating profits or losses, funds deposits and withdrawals, changes in collateral value, transfers of payment for the underlying commodities, and other factors. During intraday trading, ZCE will pay close attention to any member who has large open positions and a low balance in its clearing reserve fund. ZCE will timely issue a margin call to any member with an insufficient balance in its clearing reserve fund to ensure the adequacy of liquid resources.</p> <p>ZCE checks the balance of funds at each depository bank on a daily basis and timely conducts an assessment of any depository bank with total amount of margin which is small or highly concentrated to verify its liquidity level.</p>

<p>Key consideration3: 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.</p>	<p>Not applicable.</p>
<p>Key consideration4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin</p>	<p>ZCE’s qualifying liquid resources include margin, assets acceptable as margin, risk reserve fund, and ZCE’s own assets.</p> <p>ZCE monitors intraday liquidity and increases its liquid resources by issuing margin calls. Prudent liquidity risk management is sufficient to avoid various potential liquidity shortfalls. ZCE assesses intraday and multiday demands for liquid resources by conducting stress tests and controls liquidity risks from participants by such means as imposing position limits, prohibiting the opening of new positions, requiring the closing out of positions within a</p>

<p>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</p>	<p>prescribed period, implementing forced position liquidation or restricting funds withdrawals, or other measures to ensure the settlement of obligations on time with a high degree of confidence under potential stress scenarios.</p> <p>ZCE may ensure the adequacy of liquid resources of the designated depository banks through inter-bank transfer. ZCE obtains the required liquid resources by entering into agreements with depository banks. ZCE’s depository banks are all state-owned large commercial banks, national joint-stock commercial banks or state policy banks. In addition, ZCE monitors credit, liquidity, and operational risks from each depository bank on an ongoing basis.</p> <p>Currently, no financial instruments other than its own futures and options are cleared by ZCE.</p>
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<p>the CCP in extreme but plausible market conditions.</p>	
<p>Key consideration5: 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</p>	<p>ZCE’s qualifying liquid resources include margin, assets acceptable as margin, risk reserve fund, and ZCE’s own assets. Currently, there is no impediment for ZCE to obtain qualifying liquid resources. Its liquid resources can cover the identified minimum liquidity resource requirement.</p> <p>First, margin has been deposited in cash into ZCE-designated depository banks and ZCE may instruct the depository banks to transfer funds.</p> <p>Second, collateral currently acceptable to ZCE mainly include registered receipts, treasury bonds and USD foreign exchange. For registered receipts, ZCE has an OTC receipt trading platform through which registered receipts can be timely disposed as they are highly liquid and the platform has numerous participants. Registered receipts remain highly reliable even under extreme but possible market conditions. For treasury bonds, China Central Depository & Clearing Co., Ltd. (CCDC) is responsible for the registration and settlement of treasury bonds that are used as margin in ZCE. And ZCE can dispose of treasury bonds through the comprehensive business platform of CCDC, and it is still highly reliable under extreme but possible market conditions. For USD foreign exchange, ZCE can, through its bank- futures fund transfer system directly connected to depository banks, force the transfer of foreign currency collateral or RMB converted from such foreign currency collateral. Likewise, this arrangement is highly reliable under extreme but plausible market conditions.</p> <p>Third, currently, ZCE’s risk reserve fund is deposited in cash into state-owned large commercial banks or national joint-stock commercial banks and is readily available. Risk reserve fund may be applied upon being deliberated and approved by the Board of Governors and reported to the CSRC.</p>

<p>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.</p>	<p>Up to now, ZCE has no access to routine credit at the People’s Bank of China (PBOC), but pursuant to the agreements between depository banks and ZCE, the depository banks will provide liquidity support when needed by ZCE so that ZCE can settle payment obligations on time.</p>
<p>Key consideration6: 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</p>	<p>ZCE has developed the Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange, and has entered into agreements with depository banks whereby the depository banks may, upon the request of ZCE and within a time limit reasonable for its approval, provide prompt liquidity support up to the required level of ZCE’s liquid resources.</p> <p>If ZCE still fails to cover losses resulting from the default of any member by utilizing the proceeds from transfer of the defaulting member’s membership, ZCE’s risk reserve fund and own assets, it may use its supplementary liquid resources.</p>

<p>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.</p>	
<p>Key consideration7: 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</p>	<p>ZCE is able to obtain sufficient liquidity support and estimate and avoid potential liquidity shortfalls through liquidity tests.</p> <p>ZCE's liquidity providers are designated depository banks approved in accordance with the requirements of the <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i>. ZCE's designated depository banks are all state-owned large commercial banks, national joint-stock commercial banks or policy banks. ZCE monitors the credit, liquidity, operational, and other risks from these banks on a comprehensive and ongoing basis. ZCE has designated 15 banks as depository banks. In the event of the default of an individual depository bank under extreme circumstances, ZCE may still choose to timely obtain the required liquid resources from any other depository banks.</p> <p>A member must deposit margin in its special margin account opened with a depository bank. ZCE assesses the liquidity indicators of each member in its annual compliance inspection to prevent and control liquidity risks from the member.</p> <p>In addition, ZCE regularly conducts liquidity contingency exercises with depository banks and members to ensure that ZCE is in a position to timely defuse liquidity risk under extreme circumstances.</p>

<p>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.</p>	
<p>Key consideration8: 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.</p>	<p>Not applicable.</p>
<p>Key consideration9: 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</p>	<p>ZCE conducts settlement in RMB. In conducting stress tests, ZCE considers a wide range of forward-looking stress scenarios in a variety of extreme but plausible market conditions, including peak historic price volatilities; these scenarios also take into account the design and operation of ZCE's clearing business. A stress test is mainly designed to examine shortage of liquidity in the special fund account and the Exchange's liquidity risks resulting from members' margin deficit.</p> <p>ZCE performs at least five intraday stress tests each day. ZCE usually measures and assesses its members' credit risk exposures through simulating certain scenarios, including possible excessive utilization of margin, losses from open positions, depreciation of collateral, and other scenarios. ZCE will timely issue risk warnings to corresponding members based on the measurement results. In extreme market conditions, ZCE will also increase the frequency of intraday stress tests to measure and assess the quantity and adequacy of liquid resources.</p> <p>ZCE has set a wider range of forward-looking stress scenarios in</p>

<p>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</p>	<p>extreme but plausible market conditions, including, but not limited to, the funds condition(s) of a single member or multiple members as well as ZCE' demand for liquidity payment if the price of a contracts continuously hit the applicable limit up price or limit down price.</p> <p>If there is a shortage of liquid resources under extreme circumstances, the Clearing Department will timely report to the decision-maker.</p>
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<p>its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.</p>	
<p>Key consideration10: 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</p>	<p>ZCE has in place sound rules and procedures for use of liquid resources.</p> <p>ZCE manages liquidity risks through position limits, margin requirements, daily mark-to-market, and other measures, and its relevant business rules set out explicit provisions on the resolution of members' default, which ensures that its liquid resources can fully cover risks and that it will complete CCP clearing obligations even in the event of members' defaults and in other extreme but plausible market stress conditions.</p> <p>If a member is unable to perform its contractual obligations, ZCE may take any of the following safeguards: (1) utilizing the member's clearing reserve fund; (2) suspending the opening of new positions; (3) implementing forced liquidation of the member's positions until margin released thereafter is sufficient for performance of the obligations; or (4) using proceeds from the realization of assets pledged for margin to perform the obligations and make compensation for any resulting losses.</p> <p>If the member still fails to fulfill its contractual obligations after the above-mentioned measures have been taken, ZCE may take the following measures: (1) using the proceeds from the transfer of the member's membership to make compensation for any resulting losses; (2) upon the approval of Board of Governors, using the risk reserve fund to perform the obligations and make compensation for any resulting losses; (3) using ZCE's own assets to perform the obligations and make compensation for any resulting losses; and (4) recovering against the member through legal proceedings. In addition, ZCE may obtain liquidity support from depository banks in</p>

a stress event, so that it can continue to operate in a safe and sound manner.	accordance with the <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> as well as relevant agreements with them.
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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.

<p>Key consideration1: An FMI’s rules and procedures should clearly define the point at which settlement is final.</p>	<p>ZCE’s business rules clearly define the point at which settlement is final. According to the <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i>, ZCE implements a daily mark-to-market system under which ZCE timely notifies members of the clearing results after the completion of daily clearing. In case that a member objects to the clearing results, the member shall notify the Exchange thereof in writing before the market open of the next trading day. Under special circumstances, the member may notify the Exchange thereof in writing within two hours after the market open of the next trading day. If no objection to the clearing results is raised within a prescribed time limit, then the member shall be deemed to have accepted the clearing results as being accurate.</p> <p>The existing legal framework of China can generally ensure the legal certainty of settlement finality in China. ZCE’s provisions on settlement finality are based on the <i>Regulation on the Administration of Futures Trading, Measures for the Administration of Futures Exchanges, Measures for the Supervision and Administration of Futures Brokerages, Provisions of the Supreme People’s Court on Several Issues Concerning the Trial of Futures Dispute Cases</i>, and other applicable laws, regulations, judicial interpretations, and business rules and thus are highly protected under law, which ensures that upon the completion of settlement of its CCP business, the settlement is final and cannot be revoked or declared to be invalid. This information is published to members and investors through such channels as ZCE’s trading rules, operating guidelines and official website.</p>
<p>Key consideration2: An FMI should complete final settlement no later than the end of the value date, and</p>	<p>ZCE implements a daily mark-to-market system. ZCE’s business rules can ensure the settlement of trading is completed during the settlement day. Currently, ZCE provides no intraday or real-time settlement and has never deferred any final settlement to the next trading day.</p>

<p>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.</p>	<p>ZCE conducts day-end settlement after the market close of each trading day. After the completion of daily clearing, ZCE sends the clearing results to members through its member service system. If the clearing reserve fund of a member is lower than the prescribed minimum balance, then the clearing results are deemed as the Exchange's margin call to the member. After issuing the margin call, the Exchange may have the member's clearing reserve fund replenished by deducting the required amount in RMB or foreign exchange from the special fund account of the member through the depository bank. The member must bring its clearing reserve fund to the required minimum balance before market open on the following trading day. If the member fails to do so, the member will be prohibited from opening new positions when its clearing reserve fund is above zero but below the minimum requirement; or the Exchange is entitled to subject the member's positions to forced liquidation when the clearing reserve fund is below zero. The Exchange may issue a margin call to a member during trading hours according to market risks and changes in margin, and the member must, within the time period specified by the margin call, replenish its margin; if the member's clearing reserve fund is not replenished on time and has a negative balance, the Exchange is entitled to implement forced position liquidation against the member.</p> <p>For timeliness and finality of fund transfers, the Exchange requires designated depository banks to provide clients with safe, accurate, and timely futures margin depository and transfer services and, based on changes in the trading and settlement hours of the Exchange, adjusts their business hours accordingly to meet the needs of the futures margin depository business. The depository banks are required to ensure that they will, upon receipt of the Exchange's transfer instruction, transfer in real time corresponding funds into members' special fund account designated by the Exchange. Specific provisions thereon are set out in the <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i>, <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>, and <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i>.</p>
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<p>Key consideration3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.</p>	<p>Pursuant to applicable laws, judicial interpretations, and ministry-level rules, the business rules and detailed rules of ZCE clearly define settlement finality. After the point at which settlement is final, payments, transfer instructions or other obligations will not generally be allowed to be revoked, nor the deadline will be extended.</p> <p>Under the <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i>, a member shall timely obtain the clearing data from ZCE each day and check and properly preserve for a period of at least 20 years such data, except for futures trading dispute-related data which shall be preserved until the dispute is settled. If member objects to the clearing results, the member shall notify the Exchange thereof in writing before the market open of the next trading day. Under special circumstances, the member may notify the Exchange thereof in writing within two hours after the market open of the next trading day. If no objection to the clearing results is raised within a prescribed time limit, then the member shall be deemed to have accepted the clearing results as being accurate.</p>
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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.

<p>Key consideration1: An FMI should conduct its money settlements in central bank money, where practical and available, to avoid credit and liquidity risks.</p>	<p>ZCE uses RMB in its fund settlements.</p> <p>ZCE opens a special clearing account with each depository bank, and each member opens a special margin account with each depository bank. Transfer of funds between the Exchange and members are made through these accounts and are settled through the bank-futures fund transfer system or fund transfer references.</p> <p>The existing 15 depository banks designated by ZCE are either state-owned large commercial banks, national joint-stock commercial banks or policy banks, which have industry-leading credit and risk management competence. These banks are participants in the People’s Bank of China’s High-Value Payment System (HVPS), which ensures the</p>
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	<p>immediate execution of RMB funds settlement instructions and avoids the credit and liquidity risks posed by RMB fund settlement.</p>
<p>Key consideration2: 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.</p>	<p>ZCE conducts its settlements in RMB. Members' margins deposited in RMB into accounts at depository banks are highly liquid and freely available.</p> <p>Considering such factors as registered capital, number of business outlets, financial indicators (capital adequacy ratio, liquidity, asset-liability ratio, etc.), corporate governance, and risk management capacity, ZCE selects reputable national commercial banks with abundant capital to settle fund transactions. The <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> explicitly provides for, among others, requirements and procedures for applying banks to be qualified for ZCE's margin depository business, ZCE's requirements for business, technical level, emergency response, and other aspects of depository banks, and supervision and administration of depository banks and enforcement of their violations.</p>
<p>Key consideration3: 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</p>	<p>The <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> impose specific requirements on the type of business and level of technical skills for depository banks, the details of which are as follows:</p> <p>(1) Where there is any change in duty arrangement, or any adjustment in the department head and contact person of the futures department in a depository bank, the depository bank shall submit a written report thereon to the Exchange and the CFMMC within three business days;</p> <p>(2) Where there is significant business risk or loss that would adversely affect the credit standing of a depository bank, the depository bank shall report such risk or loss to the Exchange and the CFMMC within three business days and submit a report analyzing influence of such risk or loss on margin depository business and its responses thereto. The depository bank shall timely report any potential or foreseeable risks in overseas financial and</p>

<p>supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.</p>	<p>capital markets to the Exchange and assist the Exchange in taking precaution against such risks;</p> <p>(3) A depository bank which intends to upgrade its systems or take other measures which might adversely affect the margin depository business shall give a five-business-day notice to the Exchange in written form, the CFMMC and relevant futures brokerages, in return, prepare relative information disclosure and system tests, and formulate a contingency plan therefor;</p> <p>(4) Each depository bank shall submit a report on its margin depository business, technical maintenance, risk management, and implementation of relevant laws, regulations, ministry-level rules, and policies to both the Exchange and the CFMMC within one month after the year ends;</p> <p>(5) Depository banks shall cooperate with the annual inspection or necessary non-periodic inspections of their qualifications for margin depository business conducted by the Exchange; and</p> <p>(6) The Exchange shall conduct an annual review of the timeliness, security, accuracy, liquidity control, system operation and maintenance, service quality, business operation and satisfaction rating of depository banks' margin depository business on a yearly basis. The Exchange may refer to the annual review results when arranging for depository banks' business and Exchange-depository bank cooperation programs.</p> <p>ZCE takes the following measures to effectively manage the build-up of credit and liquidity risk exposures: ZCE decentralizes its funds in different depository banks; ZCE is entitled to transfer futures margin in a member's special fund account on an inter-bank basis; ZCE monitors and manages its funds in depository banks on a real-time basis through the bank-futures fund transfer system; and ZCE requires its members to open accounts at two or more depository banks.</p>
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<p>Key consideration4: If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.</p>	<p>ZCE uses both its own book-entry system and depository bank book-entry system when conducting fund settlements.</p> <p>For the management of the book-entry systems of the depository banks, ZCE timely monitors changes in funds deposited at the depository banks by strictly reviewing and approving the applications of members of deposit and withdrawal of funds; reconciles accounts with depository banks after the market closes on each day; and checks such business documents as return receipts and statements of accounts submitted by the depository banks to clients.</p> <p>For the management of its own book-entry system, ZCE timely identifies, measures and monitors credit and liquidity risks through its reasonably-designed clearing, bank-futures fund transfer, real-time measurement, and other systems.</p> <p>In addition, the regional office of the CSRC makes calculation and exercises supervision by comparing the total amount of funds in the segregated network of margin accounts provided by the futures brokerages, depository banks and futures exchanges with the equity of corporate clients. (see <i>the Interim Measures for the Segregated Management of the Margin of Futures Brokerages</i>)</p>
<p>Key consideration5: 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</p>	<p>The special clearing accounts and special fund accounts established by ZCE and its members respectively with depository banks are only used for fund settlements with respect to futures margin business, and the settlement is final upon completion. The <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> and the <i>Futures Margin Depository Business Agreement</i> also contain provisions on settlement finality which specifically require that: a depository bank shall provide the Exchanges with safe, accurate, and prompt futures margin depository and transfer services. When an amount is transferred into the special clearing account of the Exchange, the depository bank shall, upon receiving the amount, immediately credit it to the Exchange’s account and notify the Exchange thereof in real time. For the transfer of funds between accounts within the depository bank, the depository bank shall, upon receipt of a transfer instruction from the Exchange, credit the funds in real time</p>

<p>of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.</p>	<p>into a member’s special fund account designated by the Exchange. For inter-bank transfer of funds, the depository bank shall, upon receipt of a transfer instruction from the Exchange, transfer out the funds by the fastest means and ensure the timely arrival of the funds at the bank with which the receiving account designated by the Exchange is opened. If any other entity or individual intends to take such measures as freezing the special fund account of a member which affects the margin depository business, the depository bank shall give a prior notice thereof to the Exchange.</p>
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<p>Principle 10: Physical deliveries</p> <p>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.</p>	
<p>Key consideration 1: An FMI’s rules should clearly state its obligations with respect to the delivery of physical instruments or commodities.</p>	<p>The commodity futures contracts listed on the Exchange are all physically delivered. The physical delivery against futures contract shall refer to the two trading parties, in according with the Exchange's rule and prescribed procedures, close out open positions and transfer the ownership of the underlying products of the futures contracts. The <i>Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange, Measures for the Administration of Registered Receipts of Zhengzhou Commodity Exchange, Measures for the Administration of Designated Delivery Warehouses of Zhengzhou Commodity Exchange</i> and <i>Measures for the Administration of Designated Delivery Factories of Zhengzhou Commodity Exchange</i> specify the rights and obligations of the Exchange, members, clients, designated delivery warehouses (factories) and designated board delivery facilities. The main rights and obligations are:</p> <p>1.The physical delivery against the futures contracts held by individual clients shall be handled by the members and carried out in the name of the members at the Exchange. The delivery results will be borne by the clients. With respect to the clients appointing overseas brokers to carry out futures trading, the delivery shall be handled through their overseas brokers, and then the overseas</p>

	<p>brokers shall appoint relevant members to handle such delivery in the name of the member at the Exchange.</p> <p><i>2. Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange</i> specify the methods of physical delivery and the clearing procedures for the delivery: Physical deliveries against the contracts listed on the ZCE shall be made by warehouse delivery, factory delivery and board delivery. Warehouse delivery shall refer to the delivery of registered warehouse receipts issued by the designed warehouse from a seller to a buyer. Factory delivery shall refer to the delivery of registered factory receipts issued by the designed factories from a seller to a buyer. Board delivery shall refer to the delivery through the loading of a seller's commodities onto a buyer's truck board, train board or ship board at the delivery valuation points. Among these, warehouse registered receipts and factory registered receipts are respectively used for the warehouse delivery and factory delivery.</p> <p>The physical delivery of futures contracts shall be completed within three consecutive trading days of the delivery month, which are the first delivery day, the second delivery day and the third delivery day. Both rolling delivery and centralized delivery shall be conducted in this way. Rolling delivery shall refer to the delivery process initiated by the seller's submission of delivery intentions from the first trading day of the delivery month to the day before last trading day of the delivery month and completed by the matched parties within the prescribed time frame. Centralized delivery shall refer to the delivery process in which all the buyers and sellers holding open positions are matched for delivery after the market close of the last trading day. The delivery procedures of rolling delivery and centralized delivery are respectively clearly stated in Article 85 and Article 87, and the clearing procedures for the delivery of registered warehouse receipts, board delivery and cotton yarn covered by non-registered factory receipts are clearly regulated in Article 91.</p> <p><i>3. Right and Obligation. Rights and obligations of delivery of</i></p>
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	<p>designated delivery warehouses (factories) and designated board delivery facilities have been clearly regulated in <i>Measures for the Administration of Designated Delivery Warehouses of Zhengzhou Commodity Exchange</i>, <i>Measures for the Administration of Designated Factory Warehouse of Zhengzhou Commodity Exchange</i> and <i>Measures for Penalties for Violations of Zhengzhou Commodity Exchange</i> as well as agreements between ZCE and designated delivery warehouses (factories) or designated board delivery facilities. The establishment, suspension and revocation of designated delivery warehouses (factories) and designated board delivery facilities must be approved by the Exchange. The Exchange is entitled to supervise and administrate the futures delivery business of the designated delivery warehouses (factories) and designated board delivery facilities.</p> <p>If delivery is carried out using registered warehouse receipts, the designated delivery warehouses (factories) are responsible for load in, application for registered receipts registration, storage and load out of commodities for delivery. In the <i>Measures for the Administration of Registered Receipts of Zhengzhou Commodity Exchange</i>, the Exchange prescribes in detail the rules and procedures for the registration and cancellation of registered receipts and ensures that commodities for delivery satisfy the delivery quality standards by designating a third party quality inspection agency to conduct quality inspection. Relative delivery business shall be handled by the electronic warehouse receipt system. If delivery is carried out by board delivery, the board delivery agency shall only provide services of delivery transit, storage and quality inspection and shall not liable for the quality changes arising during temporary storage period. If registered receipts are issued by a designated delivery factory, the factory shall, when applying for registration of such receipts, provide bank guarantee letter recognized by the Exchange or cash or other payment guarantees recognized by the Exchange as performance guarantee in order to ensure the quality and quantity of the underlying commodity. In case that there are great fluctuations in the value of the commodity, the Exchange may require an increase in the amount of guarantee accordingly.</p> <p>4. The events and handing delivery defaults. Delivery defaults are clearly stated in chapter 9 of <i>The Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange</i>. It shall be deemed to</p>
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	<p>constitute a default of delivery when the seller fails to deliver the required quantity of registered receipts or physical commodities within a prescribed time period, or the seller fails to pay the required payment for commodities within a prescribed time period, or the quality of the commodities rendered for board delivery by the seller cannot meet delivery standards, or other behaviors recognized by the Exchange.</p> <p>If the behavior of one party is deemed to constitute a default of delivery, the Exchange shall impose on the defaulting party a penalty of 20% of the value of the defaulted contracts (calculated as per the delivery settlement price) to the non-defaulting party, and the delivery shall be terminated. If the delivery behaviors of a buyer and a seller simultaneously constitute a default, the Exchange shall terminate the delivery and impose a fine of 5% of the defaulted contract value on both parties. If the delivery behaviors of a member constitute a delivery default, the registered receipts or payment for the underlying commodity received by the defaulting member may be used to address the default. If delivery is terminated according to <i>Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange</i>, the Exchange's guarantee liability shall also be terminated.</p> <p>The Exchange frequently provides training on futures delivery business to members, designated delivery warehouses (factories) , designated board delivery facilities and investors.</p> <p>The above rules on futures delivery are disclosed to the public via the website of the Exchange.</p>
<p>Key consideration2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical</p>	<p>Risks associated with physical delivery at the Exchange mainly include storage risks of commodities for delivery and buyers and sellers' delivery default risks.</p> <p>1. Storage risks of commodities for delivery. Storage risk management measures are mainly as follows: (1) designated delivery warehouses (factories) and designated board delivery facilities must obtain the approval of the Exchange before engaging</p>

<p>instruments or commodities.</p>	<p>in futures delivery-related business and enter into relevant agreements with the Exchange prior to the commencement of such business to specify their rights and obligations; (2) designated delivery warehouses must have joint and several guarantee from a third party. "Delivery guarantee deposit" is required to be paid as performance guarantee. Designated delivery factories must provide bank guarantee letter recognized by the Exchange or cash or other payment guarantees recognized by the Exchange when applying for registration of registered factory receipts; (3) ZCE will conduct an on-site inspection of designated delivery warehouses (factories) and designated board delivery facilities and require them to perform self-inspection; and conduct an annual audit of designated delivery warehouses (factories). If any violations are found, ZCE may take such supervisory measures as ordering them to make rectification within a prescribed time period, suspending their load in business or revoking their qualification as such; (4) establishment of a video monitoring system. ZCE operated a video monitoring system of the Designated delivery warehouse on line. The system aims to remotely and continuously monitor the Designated delivery warehouses and the stored commodities used for delivery in the Designated delivery warehouses; (5)ZCE purchased property insurance for commodities for delivery in storage so as to diversify and transfer risks to which futures receipts are exposed; (6) resolution of defaults. In case that the holder of registered receipts are unable to exercise or fully exercise their rights to the registered receipts due to reasons attributable to a designated delivery warehouse, the designated delivery warehouses shall be liable for compensating its losses resulting therefrom; if the designated delivery warehouse fails to compensate any part of the losses, ZCE will compensate such part in accordance with relevant rules and consequently obtain the right to recover against the delivery warehouses. A designated delivery factory shall deliver to a client (the receiving party) the commodity up to the load-out standards stipulated in the contract, failing which the factory shall be liable for compensating any losses sustained by the client (the receiving party); (7) enforcement of violations. Disciplinary actions will be imposed on any designated delivery warehouses (factories) or any designated board delivery</p>
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	<p>facilities for any violations in accordance with the <i>Measures for Penalties for Violations of Zhengzhou Commodity Exchange</i>.</p> <p>2. Default risks. The Exchange will, prior to the delivery day, obtain information on the matched positions of the buyer and seller and the quality and quantity of the underlying commodity for delivery. Any delivery default will be handled in a timely manner in accordance with the provisions of the <i>Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange</i> and <i>Measures for the Administration of Registered Receipts of Zhengzhou Commodity Exchange</i> on delivery defaults. ZCE provides multi-point delivery services for its existing products. Designated delivery warehouses (factories) and designated board delivery facilities which are geographically widely distributed, have sufficient storage capacity, provide high-quality services, and performs inspection rapidly are able to support a deliverable volume large enough to minimize the risk that the seller cannot register its receipts.</p>
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Principle 11: Central securities depositories

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

Key conclusion	Not applicable
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Principle 12: Exchange-of-value settlement systems

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

Key consideration1:	ZCE eliminates principal risk by a delivery versus payment
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<p>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.</p>	<p>mechanism in the CCP clearing business.</p> <p>For transactions with ZCE acting as CCP, ZCE will be involved in the transaction as buyer to the seller and seller to the buyer and in its capacity as CCP, succeed to the rights and obligations of both parties. At the close of trading on each day, the Exchange will clear the profit or loss, trading margin, transaction fees, and other expenses for all contracts held by each member at the daily settlement price and then make a single transfer of the netted receivables and payables by crediting or debiting the member's clearing reserve fund accordingly. For physical delivery, ZCE will conduct the transfer of payments for commodities and the delivery of commodities simultaneously, which means the transfer of payments for commodities and the delivery of commodities will be handled by the Exchange within the Exchange's delivery system without relying on services provided by other FMIs so that the principal risk can be effectively eliminated. The delivery settlement, once completed, will be irrevocable and final.</p> <p>ZCE has no obligations linked to those of any other CCP.</p>
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<p>Principle 13: Participant-default rules and procedures</p>	
<p>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.</p>	
<p>Key consideration1: 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</p>	<p>The rules and procedures of ZCE clearly define a default event and methods to identify a default. ZCE shall implement a tiered responsibility system for prevention of risks under which the Exchange prevents risks from members, members prevent risks from their clients and overseas brokers, and overseas brokers prevent risks from their clients.</p> <p>Defaults recognized by ZCE include failure of a member to perform or fully perform its margin obligations to ZCE, delivery defaults, etc. Failure of a member to perform or fully perform its margin obligations to the Exchange means that the balance of the member's clearing reserve fund of that member is lower than the minimum</p>

<p>default.</p>	<p>requirement after the completion of clearing. Delivery defaults include failure of the seller to deliver the required quantity of registered receipts within a prescribed time period, failure of the buyer to pay the required payment for the underlying commodity within a prescribed time period and delivery of the underlying commodity not up to the required standards by the seller.</p> <p>According to the <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i>, if a member is unable to perform its contractual obligations due to insufficiency of funds, ZCE may take the following measures against it: using the clearing reserve fund of the member; suspending the opening of new positions; implementing forced position liquidation as required until the margin being released thereafter is sufficient to fulfill the obligations; and using proceeds from realization of assets pledged as margin fulfill obligations and make compensation for losses. If the member's funds are still insufficient after the aforementioned measures have been taken, ZCE may take such measures as applying proceeds from transfer of the member's membership to make compensation for losses and using the risk reserve fund and ZCE's own assets. In addition, the Exchange will pursue recourse against the member through legal proceedings.</p> <p>According to the <i>Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange</i>, in the event of default of a member in physical delivery, the defaulting party shall pay a penalty equivalent to 20% of the defaulted contract value (calculated at the delivery settlement price) to the non-defaulting party, and the delivery shall be terminated. If the delivery behaviors of the buyer and seller simultaneously constitute a default, the Exchange shall terminate the delivery and impose a fine equivalent to 5% of the defaulted contract value on both parties. If the delivery is so terminated, the Exchange's guarantee liability shall be terminated.</p>
<p>Key consideration2: An FMI should be well prepared to implement its default rules and procedures, including any</p>	<p>Through its internal management system and working procedures, ZCE clearly defines the responsibilities of the management team in handling defaults and the procedures for handling of defaults. ZCE has established a contingency plan for trading, settlement, delivery, technical risks or other emergencies that seriously affect or may</p>

<p>appropriate discretionary procedures provided for in its rules.</p>	<p>seriously affect the security and stability of the market.</p> <p>ZCE will, if necessary for business needs, conduct periodic or non-periodic review of its rules and working procedures to assess the enforceability of relevant rules and will assess and improve its market surveillance system, real time calculation system and other systems on an ongoing basis in its day-to-day operation in order to make itself well prepared for implementation of default rules and procedures. ZCE will perform a periodic or non-periodic assessment of the handling of defaults each year and submit relevant assessment reports and plans for revision of defaults rules and procedures to the management team, the Board of Governors and relevant specialized committees.</p> <p>ZCE keeps close communication with the CSRC, China Futures Association, CFMMC, Board of Governors and specialized committees by such means as report, oral communication or conference pursuant to relevant provisions. If a member fails to perform its contractual obligations, ZCE will timely contact relevant institutions and if the use of the risk reserve fund is necessary, will report the same to the CSRC as required.</p>
<p>Key consideration3: An FMI should publicly disclose key aspects of its default rules and procedures.</p>	<p><i>The Trading Rules of Zhengzhou Commodity Exchange, Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange, Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange, Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange and Measures for Penalties for Violations of Zhengzhou Commodity Exchange</i> set out rules and procedures for handling of member defaults and their implementation measures which are publicly disclosed on ZCE’s official website.</p>
<p>Key consideration4: An FMI should involve its participants and other stakeholders in the testing and review of the FMI’s default procedures, including any close-</p>	<p>When developing or amending rules for handling of defaults, the Exchange seek comments from a wide range of market participants and incorporates such comments into the rules so developed or amended.</p> <p>ZCE conducts non-periodic system tests and contingency drills each year with respect to default handling measures, including using clearing reserve fund, restricting the opening of new positions and</p>

<p>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.</p>	<p>implementing forced position liquidation, etc., and keeps closer communication with the CSRC, CFMMC, members and clients.</p>
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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.

<p>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</p>	<p>ZCE has well-defined clearing business systems and rules as well as clear segregation and portability arrangements, which can effectively protect the positions and related margin (collateral) of clients against the default or insolvency of members</p> <p>First, ZCE conducts clearing for all members. ZCE’s members are classified into futures brokerage members (“FB members”) and non-futures brokerage members (“non-FB members”). At present, there is no issue of misappropriation and segregation between the proprietary positions of members and the positions of their clients as the futures brokerage members of futures exchanges in China are not permitted to engage in proprietary futures business.</p> <p>Second, ZCE implements a trading code system in accordance with the <i>Measures for the Administration of Futures Exchanges</i>. The <i>Measures for the Administration of Futures Exchanges</i> provides that members and clients shall comply with the trading code system and may not engage in trading by using others’ trading code. 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. Through its account segregation and portability arrangements, the Exchange effectively protects the positions and related collateral of a member’s clients from the</p>
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<p>to ensure that such protection is effective.</p>	<p>default or insolvency of the member.</p> <p>Third, ZCE manages its members' margin separately, and FB members separately manage their clients' margins by segregating their own funds from their clients' funds. The <i>Measures for the Supervision and Administration of Futures Brokerages</i> provides that a future brokerage shall open a futures margin account at an approved futures margin depository bank and deposit clients' margin under its custody in full into the futures margin account and the special clearing account of the futures exchange. Clients' margin and futures brokerages' own assets shall be segregated and separately managed.</p> <p>Margin is managed on a segregated basis in the futures market of China, which means that margin in the futures market must, under the monitoring of the CFMMC, be operated in a segregated environment.</p> <p>Fourth, in the event of the default or insolvency of a member, ZCE will, upon the written request of the member or its client(s), complete the transfer of positions for the client(s) within a certain period of time. Under the <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i>, if an FB member is unable to continue the futures brokerage business for any reason, or is combined, divided, closed down, dissolved or bankrupt, the positions of the members' clients may be transferred upon the approval of the Exchange on the member's application for such transfer. In addition, pursuant to the <i>Interim Measures for the Administration of the Futures Investor Protection Fund</i>, the Futures Investor Protection Fund may protect the interests of investors in case of the bankruptcy of a futures brokerage.</p> <p>Fifth, supported by national laws and regulations such as the <i>Property Law of the People's Republic of China</i>, <i>Contract Law of the People's Republic of China</i>, <i>Regulation on the Administration of Futures Trading</i>, <i>Measures for the Administration of Futures Exchanges</i> and <i>Measures for the Supervision and Administration of Futures Brokerages</i>, ZCE's segregation and portability arrangements for clients' assets are enforceable.</p>
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<p>Key consideration2: 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.</p>	<p>ZCE adopts the see-through supervision generally accepted in China's futures market and strictly manages members' margin separately. ZCE requires FB members to separately manage their clients' margin by setting up subsidiary accounts for each client to separately register, manage and account for the client's collateral under the client's name. Therefore, ZCE can accurately identify the assets of each client and obtain information on the trading, positions, receipts, collateral holdings, and other aspects of each client.</p> <p>In addition, for the protection of clients' interests, ZCE reports the trading and clearing data of members and clients to the CFMMC on a daily basis; and futures brokerages report the trading and clearing data of their clients to the CFMMC on a daily basis; and the CFMMC is responsible for monitoring the margin of members and clients and timely giving an early warning to regulators and ZCE upon detection of any problem. ZCE may also obtain data on clients' interests through the CFMMC.</p> <p>The above institutional arrangements ensure different clients of the same member are segregated from each other so that there is no issue of one client's margin used by another or misappropriation of margin by members. In addition, an FB member is required to contribute RMB 2 million from its own funds to the clearing reserve fund, and in the event of a deficiency in a client's margin, will at first use its own funds to cover the deficiency. Therefore, a deficiency in the margin of a member's client will not result in the use or misappropriation of any other client's margin by the member.</p>
<p>Key consideration3: 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</p>	<p>ZCE has in place a position transfer system under which the positions and collaterals of a defaulting participant's client can be transferred to one or more other participants. If an FB member is unable to carry out the futures brokerage business for any reasons or goes through changes approved by regulators such as combination, split-up or bankruptcy, or if an FB member and client's violation of the <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i> incurs a delivery violation, default risk or any other situation recognized by ZCE, the client's positions may be transferred upon the approval of ZCE on the application for such</p>

<p>customers will be transferred to one or more other participants.</p>	<p>transfer from the member and client.</p> <p>Pursuant to the applicable laws of China, the positions and collateral of an FB member’s client are the property of the client instead of the FB member. When an FB member becomes bankrupt, its clients may dispose of their positions and collateral at their discretion, without being affected by the bankruptcy of the FB member. Therefore, ZCE has the right to transfer the positions and collateral of clients upon their request.</p>
<p>Key consideration4: 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.</p>	<p>The segregation and portability arrangements of ZCE are set out in the <i>Detailed Rules for Futures Trading of Zhengzhou Commodity Exchange</i> and <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> and are made publicly available on the official website of the Exchange. In addition, the rules, regulations and judicial interpretations such as <i>Regulation on the Administration of Futures Trading</i>, <i>Measures for the Administration of Futures Exchanges</i>, <i>Measures for the Supervision and Administration of Futures Brokerages</i> and <i>the Provisions of the Supreme People’s Court on Several Issues Concerning the Trial of Futures Dispute Cases</i>, clearly provide the legal basis for ZCE’s segregation and portability arrangements.</p>

Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Key consideration 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.

Through a range of risk management systems consistent with international standards, ZCE manages general business risks it faces in its CCP clearing business, such as financial, legal and operational risks. These systems include, among others, the member system, client code system, margin requirement system, mark-to-market system, risk reserve fund system, and default handling and loss sharing mechanism. Under the framework of these systems, ZCE has established a stable management and control system by relying on reasonable organizational structure and allocation of responsibilities as well as regular audit supervision and examination and evaluation mechanisms to timely and effectively identify, monitor and manage general business risks and take effective responsive measures to timely resolve risks.

ZCE continues to timely track, monitor and resolve market risks through regular reports and various special research reports. ZCE's department related to risk management is responsible for monitoring the day-to-day operation of its CCP clearing business, summarizing risk control practices, and timely seeking comments from market participants, and on the basis of the above information, verifying the risk control rules and system for each business. Under such circumstances as increased market pressure or severe market fluctuations, ZCE's department related to risk management will conduct monitoring and analysis more frequently.

Through well-established and strictly enforced internal control system and processes, ZCE also conducts supervision and evaluation with a focus on legal compliance, strengthens financial management, performs internal audit and discipline inspection to continuously monitor and manage general business risks. The potential impact of commercial risks on cash flows and capital is an important part of the assessment of commercial risks. During the

	<p>assessment of general business risks, ZCE also takes into full account the potential impact of general business risks on its liquid assets. Generally, ZCE covers potential losses from general business risks through the risk reserve fund and specific-purpose (risk) reserve fund. ZCE’s current regular stress tests on various CCP clearing businesses indicate that the existing liquid assets can cover losses from risks in extreme stress scenarios. The sufficiently increasing risk reserve fund and the accrued specific-purpose (risk) reserve fund ensure that ZCE can still cover losses from risks in extreme stress scenarios even in the context of future rapid development of business. In addition, the sufficient retained earnings of the Exchange, mainly consisting of cash, are stored in effectively-supervised and well-managed reputable commercial banks and can cover the current operating expenses and estimated operating expenses in unfavorable market conditions.</p>
<p>Key consideration2: 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</p>	<p>ZCE has highly sufficient and growing net liquid assets which can support ZCE to continue stable operations as a going concern if its CCP clearing business incurs general business losses. The size of ZCE’s liquid assets funded by equity is much greater than that of possible losses incurred as a result of potential general business risks. These assets funded by equity are highly liquid and can maintain the continuity of ZCE’s operations and services in case of general business risks.</p>

<p>recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.</p>	
<p>Key consideration³: 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.</p>	<p>The <i>Measures for the Administration of Futures Exchanges and Bylaws of Zhengzhou Commodity Exchange</i> specify the circumstances requiring the wind-up of ZCE and the procedures therefor. With the objective to maintain the continuity of business in all conditions, ZCE has enacted a viable business emergency management system and a viable recovery or orderly wind-up plan.</p> <p>ZCE has sufficient net assets and liquid assets to cover general business risks. ZCE holds sufficient liquid net assets funded by equity to cover operating expenses for more than six months and to fully support and maintain the continuity of its business.</p>

<p>However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.</p>	
<p>Key consideration4: 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.</p>	<p>ZCE’s liquid assets funded by equity mainly consist of cash and short-term bank deposits in state-owned large commercial banks and listed national joint-stock commercial banks effectively supervised by the competent authorities. In unfavorable market conditions, ZCE can withdraw bank deposits in advance and convert them into cash with little or no loss in value.</p> <p>ZCE pays attention to the quality and liquidity of its liquid net assets by conducting daily accounting operations, regularly preparing financial analysis reports, and developing annual financial budget and capital plan in order to satisfy its operating needs.</p>
<p>Key consideration5: 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</p>	<p>With adequate highly liquid net assets, ZCE now has no need to develop a plan for raising additional capital.</p>

the board of directors and updated regularly.	
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<p>Principle 16: Custody and investment risks</p> <p>An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.</p>	
<p>Key consideration1: 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.</p>	<p>Margin from members and ZCE's own funds, primarily in the form of monetary capital, are all deposits in commercial banks. Commercial banks currently selected for such purpose are depository banks designated by the Exchange.</p> <p>For the safekeeping of assets, margin, risk reserve fund, specific-purpose (risk) reserve fund, and retained earnings are deposited in accordance with <i>Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange</i> and <i>Financial Management System of Zhengzhou Commodity Exchange. Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> which sets out criteria for selection of designated depository banks, specify requirements for applicants who intend to become depository banks designed by the Exchange, including specific requirements on eligibility application, rule-making, IT system, business operation rules, and risk control and prevention; and also provides that the Exchange may supervise the credit standing, system security, business performance, and other aspects of designated depository banks and perform an annual inspection and evaluation of these depository banks, including their business operation rules, IT system, qualification review, and internal control.</p>
<p>Key consideration2: An FMI should have prompt access to its assets and the assets provided by</p>	<p>At present, all designated depository banks of the Exchange are located in the same time zone. To ensure the safety and quick availability of assets, the <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i> provides that:</p> <p>(I) Depository banks shall take effective measures to reduce the</p>

<p>participants, when required.</p>	<p>liquidity risk of funds, and shall not restrict futures brokerage members' (hereinafter "FB members") withdrawal and deposit of funds without the Exchange's written permission. The Exchange may make inter-bank transfer of margins to test the security of margin deposits at any time.</p> <p>(II) In case that the Exchange applies for assistance when having any liquidity demand for clearing purpose, the depository banks shall extend financial support to the Exchange.</p> <p>(III) Depository banks shall not assist the Exchange's members in turning the funds in their futures margin accounts into pledged assets, nor shall they misappropriate clients' futures margins to repay the debts of FB members, overseas brokers and the Exchange.</p> <p>(IV) Depository banks shall reject any illegal freeze or transfer of the funds in the Exchange's special clearing accounts by any other entity or individual, and shall timely notify the Exchange if other entities are to freeze the Exchange members' special margin accounts or to take any other measures that would adversely affect the futures margin depository business.</p> <p>Under the <i>Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange</i>, ZCE is entitled to quickly access and dispose of all assets. The Exchange strictly differentiates its own assets from other assets, deposits all the assets in multiple designated depository banks as "readily with drawable demand or term deposits", a prudent investment strategy which provide full protection for these assets, and maintains the optimal liquidity of and right to dispose of the assets.</p> <p>In the event of the default of a member, ZCE can quickly obtain from the Exchange's special clearing account at a designated depository bank margin that the defaulting member has paid, or compulsively debit the member's margins from its special fund account at a designated depository bank, so as to cover ZCE's losses resulting therefrom.</p> <p>The Exchange currently has no assets deposited in other time zones and jurisdictions.</p>
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<p>Key consideration3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.</p>	<p>The Exchange insists on prudently and strictly selecting depository banks and comprehensively evaluating and monitoring its risk exposures to depository banks. ZCE now has 15 depository banks, all of them are reputable national commercial banks or policy banks. They ensure the safety of depository banks and diversifies ZCE’s risk exposures to depository banks. Generally, ZCE inspects and assesses the credit standing and depository business performance of depository banks on a yearly basis and requires a depository bank to report any material business risk or loss that will adversely affect its credit standing to the Exchange and the CFMMC within three business days, accompanied by an analysis of the impact of such business risks or losses on its margin depository business and its responses thereto.</p> <p>ZCE has opened a special clearing account at 13 depository banks and requires each member to open a special fund account at two or more depository banks in order to diversify risk exposures posed by a single depository bank.</p> <p>ZCE monitors the liquidity and concentration of margin deposited in each depository bank on a real time basis. To test the security of margin deposits, ZCE may, pursuant to applicable rules, conduct risk pressure tests on margin in each depository bank by inter-bank fund transfer on a non-periodic and non-quantitative basis to inspect whether the margin deposits in the depository bank is safe.</p>
<p>Key consideration4: 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</p>	<p>ZCE’s investment strategy is consistent with its overall risk management strategy and is primarily prudent. Specifically, ZCE deposits its own funds in state-owned large commercial banks and listed national joint-stock commercial banks as “readily withdrawable demand or term deposits” to fully protect the security and liquidity of assets. Up to now, the Exchange has never invested assets in stocks, trusts, and non-self-use real estate, etc.</p>

<p>allow for quick liquidation with little, if any, adverse price effect.</p>	
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<p>Principle 17: Operational risk</p>	
<p>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.</p>	
<p>Key consideration1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.</p>	<p>ZCE has fundamentally enhanced its ability to identify and prevent operational risks by establishing scientifically sound rule and business systems. ZCE has established a range of rules and policies for operational risks and the working procedures for their implementation in order to identify and control possible operational risks. The rules and policies for management of operational risks already released by ZCE mainly include the <i>Working Methods of the Board of Governors of Zhengzhou Commodity Exchange</i>, <i>Working Methods of the IT Leading Group of Zhengzhou Commodity Exchange</i>, <i>Measures for Information Security Management of Zhengzhou Commodity Exchange (for Trial Implementation)</i>, <i>Contingency Plan for Information Security Incidents of Zhengzhou Commodity Exchange</i>, and <i>Measures for the Administration of Operation and Maintenance of Information System of Zhengzhou Commodity Exchange</i>.</p> <p>For ZCE, the main sources of operational risks include defects of or attacks on IT systems, man-made operational errors, the insufficiency of the systems’ capacity to meet business needs, impact of new material business after being launched, and interruption of utility services.</p> <p>ZCE has created the following framework for management of</p>

	<p>operational risks:</p> <p>First, in terms of organizational structure, ZCE’s Board of Governors deliberates and regularly evaluates the risk management system and framework and through its Risk Management Committee, periodically provides advice on the improvement of the system and proposes suggestions on the assessment and disposition of major risks and emergencies. In addition, ZCE has set up the Internal Audit Department and Legal & Compliance Department to conduct internal risk assessments and audits and compliance inspections.</p> <p>Second, in terms of system design, ZCE has developed a set of measures for monitoring and management of operational risks, i.e. ISO20000 IT operations and maintenance management system, in accordance with relevant rules published by the CSRC and relevant international standards. ZCE tracks and resolves IT risks through optimization of its processes, including the optimization of planning, implementation and result verification. ZCE resolves non- IT risks through a range of processes such as risk analysis, risk disposition, risk tracking, and risk disposition reporting. These systems, polices, procedures and control measures are recorded on the ITIL management platform and in minutes of meeting.</p> <p>Third, ZCE ensures the high stability and reliability of the operation of its IT systems by developing standards and enhance management. In terms of network and information security, ZCE has formulated the <i>Outline for Information Security Management of Zhengzhou Commodity Exchange</i> and <i>Measures for Information Security Management of Zhengzhou Commodity Exchange (for Trial Implementation)</i> and adopts the ISO27001 standard security management system to manage the entire operation and maintenance process. Also, ZCE regularly reviews and audits the operation and maintenance process to ensure the timely identification and detection of any operational problems.</p> <p>Fourth, ZCE adopts the ISO20000 standard capacity management process to manage increasingly growing capacity demand. According to the requirements for capacity management workflow, the IT Department evaluates capacity operation metrics on a quarterly basis and develop the capacity plan for the next year on a</p>
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	<p>yearly basis.</p> <p>Fifth, for its production system, ZCE implements a mechanism where each of the operation, verification and review processes is performed by each person so that each employee can satisfy the high accuracy requirements when operating the system. ZCE also conducts internal supervision and inspection to minimize operational risks. In addition, ZCE frequently provides education on operational risks to, based on lessons from past risk events, improve the capability of technical and business personnel to predict and identify operational risks.</p> <p>Sixth, in terms of the trading continuity plan, to ensure that the continuity of trading is not interrupted, ZCE has formulated the <i>Contingency Plan for Information Security Incidents of Zhengzhou Commodity Exchange</i> and relevant guidelines; entered into agreements with utility service providers; and established distributed data centers (production data center, local disaster recovery center, and remote disaster recovery center) to respond to sudden risks. Besides, ZCE regularly organizes multi-level system drills such as primary-backup center switching drills and “back-to-back” emergency drills to improve the emergency response capability of technical and business personnel.</p>
<p>Key consideration2: 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</p>	<p>In accordance with the <i>Bylaws of Zhengzhou Commodity Exchange</i> and <i>Working Methods of the Board of Governors of Zhengzhou Commodity Exchange</i>, ZCE’s Board of Governors and management team jointly bear ultimate responsibilities for operational risks. The management team reports the Exchange’s operational risk management framework to the Board of Governors for review and approval. Generally, the Board of Governors reviews and approves relevant reports of the management team on a semi-annual basis. The operational risk management framework is subject to the supervision and audit of the CSRC.</p> <p>ZCE pays high attention to possible operational risks arising from material changes in systems. ZCE has formulated the <i>Measures for Information Security Management of Zhengzhou Commodity Exchange (for Trial Implementation)</i> and other normative documents to require the performance of full and prudent reviews,</p>

<p>after significant changes.</p>	<p>audits and tests of systems, operational policies, procedures, and control measures during the launch of new business and IT system upgrade. Also, ZCE has developed standards for quality control in the preliminary design, development and testing of its information system.</p> <p>The following steps are required for ZCE to change its systems, operational policies, procedures, and control measures: internally seeking comments and conducting discussions; preparing a plan and having the plan discussed by a relevant expert panel; and internally performing multiple rounds of tests to ensure that the internal tests are free of problems; making business communication with members, providing training for members and organizing members to conduct multiple rounds of tests to ensure the normal implementation of such change. In the event of any material change to the system of a member, the member is required to notify ZCE in advance and perform sufficient tests together with ZCE, and such change will be implemented only after being approved by ZCE in order to reduce risks arising from such change. Besides, ZCE has always provided a simulation test environment for members to conduct tests so that the members can discover operational problems as early as possible. ZCE organizes an internal review of its operation and maintenance process on a yearly basis and will increase the frequency of such internal review in the event of any material change therein.</p>
<p>Key consideration3: An FMI should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.</p>	<p>The operational stability objectives of the Exchange are to “ensure the compliance, security, efficiency and innovation of operations, no interruption of system operation, and no loss of data”. For the operation of the information system, ZCE has set different operational stability objectives for different services and considering business systems’ differences in influence and importance, etc., established differentiated operational security objectives, including 99.99% availability of the core trading system, 99.9% availability of membership service and unified account-opening systems, and 99.5% availability of other systems 99.5%. For trading data, the availability and integrity objective is 100%.</p> <p>To achieve the above objectives, ZCE has provided support in human, material and financial resources, built distributed data</p>

	<p>centers, established the IT service management system supporting operations, and developed relevant policies and procedures to offer guidance over operations. ZCE conducts all operation and maintenance activities in accordance with the requirements of the IT service management system with a view to increasing operational stability. Take a class II change in the information system for instance, a change plan is required to be developed, then reviewed by personnel in relevant positions, and finally approved after passing the review prior to the implementation of such change and when such change is implemented, the double check mechanism is applied. A focused security and change review period follows the implementation of such change.</p>
<p>Key consideration4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.</p>	<p>ZCE manages capacity by adopting the ISO20000 management system in order to meet increasingly growing capacity demand. When designing its information system, ZCE is required to consider the scalable requirements of the system and estimate a capacity that meets its capacity scalable need within at least five years. Capacity management covers all assets in the information system, including software, hardware and personnel, etc. The capacity management of the software system mainly includes capacity monitoring, audit and planning. Operation and maintenance personnel on duty are responsible for the day-to-day monitoring of capacity operation metrics through the monitoring system. Person in charge of each position is responsible for auditing capacity operation metrics on a quarterly basis, developing the next year’s capacity plan each year, and timely expanding the capacity of various systems based on actual capacity demand, including parameter adjustment, memory upgrade, hard disk expansion and bandwidth upgrade.</p> <p>Operation and maintenance personnel on duty at ZCE’s System Operation Center monitor capacity through the monitoring system each day. When the capacity metrics reach the prescribed threshold, the monitoring system will give an alarm, and the monitoring personnel will record the event and through the operation and maintenance platform, report the event for handling. According to the capacity management workflow, ZCE will, if necessary, timely expand the capacity of the system. In addition, ZCE has established a contingency plan to deal with emergency capacity.</p>

<p>Key consideration5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.</p>	<p>ZCE has developed the <i>Measures for Information Security Management of Zhengzhou Commodity Exchange (for Trial Implementation)</i> to set out comprehensive rules on information and data security, backup mechanism, and security incident handling procedures, and assumption of responsibilities therefor. ZCE manages its day-to-day information security by adopting the ISO27001 international security management system. Specifically, ZCE physically isolates its production network from external networks, takes high-level and all-round physical safeguards for the production environment, deploys multiple centers for important systems, and assigns two persons (one acting as the person in charge and the other as the assistant) to one position.</p> <p>ZCE deals with vulnerabilities of and threats to the information system through real-time monitoring and regular risk analysis, specifically including: 1. a comprehensive risk assessment conducted on a yearly basis through the information system security level protection; 2. an information security inspection performed on a quarterly basis; 3. notification of day-to-day information security incidents and vulnerabilities; 4. security inspection and evaluation conducted prior to material changes.</p>
<p>Key consideration6: 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</p>	<p>ZCE’s continuity plan covers information system emergency response, business personnel emergency response, and public sentiment supervision and guidance, and others and ensures timely recovery of the information system, continuity of business, and stability of the market.</p> <p>In its day-to-day management, ZCE’s IT monitoring system monitors in real time the operation of core systems during trading hours, and its host and network monitoring software monitors in real time the host and network on a 24-hour basis. In addition, ZCE has dedicated personnel on duty under a 24-hour shift schedule inspect the machine room every two hours to investigate hidden problems and coordinate with relevant departments and service providers in timely resolving the problems.</p> <p>ZCE has also established a contingency mechanism for resolution of risks, set up leading group for emergencies, and formulated the <i>Contingency Plan for Information Security Incidents of Zhengzhou</i></p>

<p>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.</p>	<p><i>Commodity Exchange</i> and other relevant guidelines which respectively set out comprehensive rules on the rapid handling of market, press & public sentiment, public and IT system emergencies. In response to extreme situation of the epidemic, a special technical support plan and emergency response plan were formulated, and the operation and maintenance personnel were grouped and separated on duty to ensure the safe and stable operation of the technical system during the COVID-19 epidemic.</p> <p>According to the aforementioned rules and guidelines, ZCE's continuity plan requires that in the event of a material failure, the trading system can resume operation at the backup site within five minutes, and other systems within two hours. For this purpose, ZCE has improved and deployed relevant systems and made detailed allocation of resources. ZCE prepares its business continuity plan on a yearly basis. According to the plan, ZCE will conduct drill tests each quarter to simulate various failure scenarios, ensuring that relevant personnel can rapidly and accurately complete the contingency procedures in the event of a real failure.</p>
<p>Key consideration7: 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.</p>	<p>Risks posed by third parties to ZCE mainly include risks of interruption of communication line provided by communication operators and of interruption of power supply by the power supplier. ZCE manages these risks mainly by: using the communications line monitoring system to detect communication failure of the dedicated line provided by a communication operator and timely coordinating with the communication operator in solving the failure; leasing the lines of multiple communication operators to create a redundant network system; adopting double circuit transmission lines according to a relevant agreement with the power supplier to ensure power supply in its day-to-day operation; and having in place a standby power supply and power generating equipment to deal with interruption of power supply under extreme circumstances.</p> <p>ZCE has not outsourced key services. It's trading, clearing, delivery, market surveillance, and electronic receipt and other systems are all developed and maintained by itself. ZCE outsources the development of peripheral systems in accordance with the <i>Measures for the Administration of Information Technology Personnel Outsourcing of Zhengzhou Commodity Exchange</i>. On the other hand, ZCE exercises constraint over the outsources services through confidentiality management and day-to-day management and</p>

	<p>records and audits the outsourced operations by security review measures in order to ensure that the outsourced services can meet reliability and contingency requirements.</p> <p>ZCE will not pose any risk to any other FMIs as its business now is not linked to theirs.</p>
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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.

<p>Keyconsideration1: 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.</p>	<p>Participants of ZCE’s CCP clearing business include members, clients, and overseas brokers.</p> <p>In terms of market participants, ZCE classifies its members into FB members and non-FB members. The <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange</i> specifies relevant financial indicators, management rules, and other access criteria for two types of members. In addition, the <i>Measures for the Administration of the Futures Trading of Futures Brokerage Members Appointed by Overseas Brokers</i> prescribes in detail financial, operating, technical, and other requirements of participating overseas brokers. Requirements on various participants are imposed based on reasonable and risk-related principles.</p> <p>In terms of access of market participants to its services, ZCE, in the <i>Bylaws of Zhengzhou Commodity Exchange</i>, sets forth in detail the rights of its members, including rights to participate in the General Assembly, use trading facilities provided by the Exchange, have access to futures trading-related information and services and so on. The <i>Measures for the Administration of the Futures Trading of Futures Brokerage Members Appointed by Overseas Brokers</i> also contains provisions on the delivery, clearing and settlement, and other rights enjoyed by clients of overseas brokers. Relevant rules which ensure that various participants are able to have fair and open</p>
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	<p>access to services have been made public to market entities through ZCE’s official website.</p> <p>Meanwhile, ZCE follows overseas regulatory standards. ZCE was included into the positive lists of post-trade transparency and position limits assessments that the European Securities and Markets Authority(ESMA) conducted over third-country trading venues and has been granted with the license of the Recognized Market Operator (RMO) by Monetary Authority of Singapore.</p>
<p>Key consideration2: An FMI’s participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI’s specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.</p>	<p>For the security of the futures market and under the consideration of business risks from each type of members, ZCE requires a registered capital of not less than RMB 30,000,000, a clearing reserve fund of not less than RMB 2,000,000 for an FB-member, as well as a registered capital of not less than RMB 5,000,000 and a clearing reserve fund of no less than RMB 500,000 for a non-FB member.</p> <p>For the efficiency of the futures market, ZCE has , according to <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange</i> and <i>Measures for the Administration of the Futures Trading of Futures Brokerage Members Appointed by Overseas Brokers</i>, clearly defined the application conditions, application documents, procedures and time required for the participants which have been publicly disclosed through on ZCE’s official website.</p> <p>ZCE has published applicable laws, regulations, and its business rules on its official website and subject to applicable national laws and regulations and controllability of risks, ZCE will not unduly restrict participants from engaging in the futures market by imposing other restriction on them.</p>

<p>Key consideration3: 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.</p>	<p>Pursuant to the regulatory requirements of financial regulators, ZCE has developed a range of business rules to specify participation requirements for participants and methods of handling of their violations or failure to meet participation requirements. Such rules have been publicly disclosed to the market.</p> <p>First, ZCE monitors a member’s compliance with participation requirements by daily mark-to-market, compliance supervision and other measures.</p> <p>Second, according to the <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange</i>, ZCE conducts sampling or comprehensive inspection of a member’s implementation of the business rules each year and regularly checks a member’s compliance with participation requirements, etc.</p> <p>Third, the <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange</i> explicitly states that a member shall timely report significant changes in its operation and other aspects to the Exchange in writing. The foregoing measures ensure that participants are able to comply with ZCE’s participation criteria on an ongoing manner.</p> <p>For participants with a deteriorating risk profile, the <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange</i> provides that the Exchange shall have the authority to require a member to make corrections within a certain period in the event that the member is involved in any of the following conditions I . poor financial management, long-term loss, poor business performance or significant decline of repayment capability II . significant problems are detected during annual inspection.</p> <p>In the event that the member fails to make corrections within the prescribed time period, the Exchange shall have the authority to suspend the member from futures and options trading or cancel its membership with the approval of the Board of Governors.</p> <p>In addition, the <i>Measures for Penalties for Violations of Zhengzhou Commodity Exchange</i> prescribes a range of penalties for violations against each type of participants, including without limitation, giving warnings, circulating a notice of criticism, and suspending trading.</p>
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	<p>For participants who violate or no longer comply with the participation requirements, both the Measures for the Administration of Memberships of Zhengzhou Commodity Exchange and Measures for Penalties for Violations of Zhengzhou Commodity Exchange have provide the suspension and orderly exit procedures, mainly including revocation of membership and] expulsion from participant status. Market participants having been expelled from participant status by the Exchange shall liquidate their positions, close trading business and settle claims and debts within 20 business days upon the effective date such expulsion. Market participants having been expelled from participant status by the CSRC shall not engage in futures and options business on the Exchange within the expulsion period.</p>
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Principle 19: Tiered participation arrangements

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

<p>Key consideration1: 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.</p>	<p>Under the framework consisting of current laws, regulations, ZCE’s rules and their complementary detailed rules, ZCE implements an all-member clearing system with a tiered participant arrangement. ZCE can collect basic account information on indirect participants to identify, monitor, and manage any material risks arising from such tiered participation arrangement.</p> <p>As part of the all-member clearing system, ZCE’s tiered participant arrangement classifies participants into direct and indirect participants. Direct participants include FB members and non-FB members; indirect participants include clients and overseas brokers represented by futures brokerages. ZCE conducts clearing for FB-members and non-FB members, and FB-members conduct clearing for clients and overseas brokers they represent. Clients submits account-opening applications to ZCE via the unified account management system of the CFMMC, and ZCE allocates trading codes to clients based on their name, certificate number, and other information and thus can have access to clients’ basic information.</p> <p>ZCE directly takes risks from clearing members but not those from clients and overseas brokers.</p> <p>ZCE adopts a trading code system. A client can have only one client code at ZCE, and the client code can be combined with other different member code to form several trading codes. ZCE may, through trading codes, identify the trading, detailed positions and orders of clients and members to have a direct understanding of their trading and position information.</p> <p>Pursuant to the <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>, ZCE implements margin, price limits, position limits, large position reporting, forced liquidation, risk warning, and other systems to effectively prevent and control</p>
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	<p>default risks.</p> <p>ZCE monitors and identifies trading violations of members and clients and pursuant to applicable provisions of the <i>Measures for Penalties for Violations of Zhengzhou Commodity Exchange</i>, imposes penalties on them.</p> <p>ZCE gets to know risk control arrangements of members for their clients and examines members' risk management competence through visits, on-site inspections, and other methods.</p>
<p>Key consideration2: An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.</p>	<p>ZCE is able to identify material dependencies between direct and indirect participants that may have a potential impact on ZCE. ZCE can, through clients' trading code, obtain information on the positions of members and clients, collect statistical data on the distribution of positions of each member in each contract and identify the position concentration and other aspects of members and clients.</p> <p>In addition, futures brokerages submit clients' trading and clearing data to the CFMMC on a daily basis. The CFMMC is responsible for monitoring the security of futures margins.</p>
<p>Key consideration3: 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</p>	<p>ZCE can monitor the trading of members and clients, identify clients who have a significant proportion of trading or positions, and monitor and assess the adequacy of members' funds on an ongoing basis.</p> <p>A futures brokerage has to be established in accordance with the provisions of the <i>Regulation on the Administration of Futures Trading, Measures for the Supervision and Administration of Futures Brokerages</i> and <i>Measures for the Administration of Risk-Based Regulatory Indicators of Futures Brokerages</i>.</p> <p>ZCE specifies its members' rights and obligations and manages their brokerage qualification pursuant to the <i>Measures for the Administration of Memberships of Zhengzhou Commodity Exchange</i>; manages default risks from members in accordance with the <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>; and regulates trading activities of members and clients in accordance with the <i>Measures for Penalties for</i></p>

<p>manage the risks arising from these transactions.</p>	<p><i>Violations of Zhengzhou Commodity Exchange.</i></p> <p>In addition, ZCE may also take various supervisory measures, including, without limitation, disseminating violation cases for warning purpose, visiting members, and performing on-site inspections.</p>
<p>Key consideration4: An FMI should regularly review risks arising from tiered participation arrangements and should take mitigating action when appropriate.</p>	<p>ZCE reviews risks arising from its tiered participation arrangement on a periodic and non-periodic basis, and timely take measures to resolve risks which are uncovered during such review.</p> <p>ZCE prevents and resolve risks in accordance with the applicable provisions of the <i>Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange</i>. ZCE gets to know risk control arrangements of members for their clients and examines members' risk management competence through visits, on-site inspections, and other methods. ZCE updates the tiered participant management framework for risk-based regulation on a periodic and non-periodic basis.</p>

<p>Principle 20: FMI links</p>	
<p>An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.</p>	
<p>Key conclusion</p>	<p>Not applicable.</p>

Principle 21: Efficiency and effectiveness

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

Key consideration1:
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.

ZCE seeks advice and suggestions from a wide range of participants, through holding the General Assembly, Board of Governors meetings, Board of Supervisors meetings, and specialized committee meetings, etc. and organizing relevant discussion meetings and field research activities, to ensure that the needs of participants and the markets it serves are reflected by the clearing and settlement mechanism, operating system, settlement system, and technologies designed and implemented by ZCE as well as its services and products.

Key consideration2:
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.

ZCE performs its duties in accordance with the *Regulation on the Administration of Futures Trading* and *Measures on the Administration of Futures Exchanges*, exercises self-regulation in accordance with the *Bylaws of Zhengzhou Commodity Exchange*, *Trading Rules of Zhengzhou Commodity Exchange* and its detailed rules and measures, and provides venues, facilities, and related services for centralized trading of futures contracts based on the principles of openness, fairness, justice, and good faith. ZCE conducts front-line market supervision for futures trading, prevents market risks, and organizes trading activities in an effort to develop itself into “an industry-leading risk management platform and world-renowned commodity pricing center”. In addition, ZCE sets short and medium-term goals for different stages in accordance with its overall goals. ZCE’s short-term goal is to become one of the top futures and derivatives exchanges in the world that features diversified products and instruments, achieves synchronized development in both the OTC and exchange-traded markets, maintains safe and efficient operation, and fully performs its functions.

	<p>ZCE breaks down its long, medium and short-term goals into tasks at the specific operational level, such as product R&D, market development, system infrastructure construction, human resources management, market supervision, and opening up to overseas investors. To ensure such goals are measurable and achievable, ZCE scientifically sets sound milestones, clearly defines indicators, combines quantitative and qualitative methods, and designates responsible departments.</p>
<p>Key consideration3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.</p>	<p>ZCE deliberates material matters in business development by holding the General Assembly and Board of Governors meetings, etc. ZCE also regularly discusses such topics as product innovation, market development, operational management, and strategic plan at specialized committee meetings to continuously improve the services it offers to the markets.</p> <p>ZCE’s internal and external audit is also an important part of its efficiency and effectiveness review mechanism. Designed to strengthen internal management, promote compliance operation, prevent business risks, and improve operational efficiency, the internal audit fully covers ZCE’s financial operation, internal control, business expansion and the performance of duties by its personnel. In addition to establishing the internal audit mechanism, ZCE is also subject to the review of the Ministry of Finance (MOF), the National Audit Office (NAO), and the CSRC on its efficiency and effectiveness and engages a well-known accounting firm to conduct regular audits.</p> <p>Before the implementation of its each business and the go-live of its each business system, ZCE will fully consider the demand of participants and the markets, solicit advice and suggestions from market participants, and based on the feedback, revise business rules, optimize operational procedures, and improve system functions to continuously enhance efficiency and effectiveness.</p>

Principle 22: Communication procedures and standards

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

Key consideration1:
An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.

ZCE’s trading system currently adopts international communication standard, such as Ethernet and TCP/IP protocols, at the underlying communication level; The Exchange adopts the Futures Trading Data Exchange Protocol (FTD Protocol), the financial industry standard of the People’s Republic of China (JR/T0016—2004), at the application communication level to complete data exchange and communication with the systems of its members. FTD Protocol is a standardized information exchange protocol and can easily convert the formats of messages with internationally accepted standards such as FIX. For the transfer of funds with banks, ZCE adopts the inter-institution XML private communication protocol which is secure and reliable. ZCE plans to allow its next-generation trading system to support international standard agreements such as FIX by means of protocol conversion.

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.

<p>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.</p>	<p>ZCE has adopted a set of clear and comprehensive rules and procedures which are fully disclosed to the public through its official website (www.czce.com.cn). Notices on revision of rules, etc. are mainly published on the official website, and those on system upgrade and transaction fee adjustment are mainly released through the member service system.</p> <p>ZCE has a section called “Announcements and Notices” presented at an important position on the homepage of its official website and in case of a special event which is of significant importance, will present the event a special page for a certain period of time so that market participants and the public are informed of ZCE’s latest developments and comprehensively and timely conduct an accurate and objective assessment of risks they will incur by participating in ZCE’s business.</p> <p>Before developing or amending rules, ZCE will seek comments from a wide range of market participants through visits, questionnaires surveys, meetings on discussion of contract rules, and other means; after the issuance of rules and procedures, ZCE will explain the rules and procedures through a variety of ways such as training meetings or video lectures to make sure that they are easily understood and widely acceptable to the market participants.</p> <p><i>Bylaws and Trading Rules</i> as amended by ZCE are required to be deliberated and approved by the General Assembly and approved by the CSRC; contracts and business rule as developed or amended by ZCE are required to be reported to the CSRC in advance and approved by the Board of Governors.</p> <p>Article 87 and Article 88 of the <i>Measures for the Administration of Futures Exchanges</i> as well as Article 100 of the <i>Trading Rules of Zhengzhou Commodity Exchange</i> provide in detail for abnormalities in the futures market and emergency measures available therefor.</p>
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<p>Key consideration2: 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.</p>	<p>ZCE has disclosed clear descriptions of its systems’ design and operations as well as market participants’ rights and obligations.</p> <p>ZCE’s IT Department keeps detailed documents on the information of the systems’ design and operations. The CSRC will conduct an annual investigation of ZCE’s information technology resources. ZCE is required to report to the CSRC the operational information of its key systems and will, if necessary, release to market participants IT system information related to them and the requirement for the IT systems of market participants.</p> <p>The Chapter 3 of the <i>Measures for the Administration of Futures Exchanges</i> as well as the Chapters 2 and 3 of the <i>Bylaws of Zhengzhou Commodity Exchange</i> specify the rights and obligations of market participants so that market participants can fully understand their rights and obligations and assess their participation risks.</p>
<p>Key consideration3: 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.</p>	<p>ZCE has provided market participants with necessary materials and training to facilitate them understand its rules and procedures.</p> <p>ZCE has a column called “Member Services” on its official website to publish business guidelines on trading, delivery and clearing, including detailed descriptions of specific business processes; the “Derivatives Academy” column on the official website explain the market function, futures knowledge and business process as well the key points of risk management.</p> <p>ZCE carries out various forms of investor education activities and regularly holds video lectures for all members and market participants to explain rules and procedures, market risks etc.; provides compliance training to members each year; and holds multiple discussion meetings on rules each year. Members and financial institutions have always provided training on futures knowledge to market participants through the “San Ye” platform. ZCE freely distributes various printed publicity materials on products, market, risk control, and rules to the participants of these events.</p> <p>If ZCE finds that any participant is short of a good understanding of rules, procedures and participation risks, ZCE will remind the</p>

	<p>participant by multiple means such as telephone communication or written letters.</p>
<p>Key consideration4: 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.</p>	<p>ZCE publicly discloses its fees for each service and its policies on available discounts on its official website or member service system and in the event of any adjustment to its current service fees and discount policies, will issue a prior notice thereof to the market.</p>
<p>Key consideration5: 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.</p>	<p>ZCE completes regularly and disclose publicly in both Chinese and English on its official website its self-assessment report in accordance with the requirement of the <i>CPSS-IOSCO Disclosure Framework for Financial Market Infrastructures</i>.</p> <p>The basic data disclosed by ZCE includes price information, trading volume, trading turnover, delivery volume, delivery turnover, exercise volume, open interest, rankings by trading volume, receipt data, etc. Disclosure is made at a regular frequency, such as on a real time, daily, monthly, quarterly or yearly basis, depending the information being disclosed. The Exchange may also disclose other data to the market through its official website or any We-media platform.</p>

Principle 24: Disclosure of market data by trade repositories

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

Key conclusion	Not applicable
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V. List of available public resources

Criminal Law of the People’s Republic of China (an excerpt)	http://www.czce.com.cn/cn/flfg/flfg/fl/webinfo/2018/08/1533010808956101.htm
Securities Law of the People’s Republic of China	http://www.czce.com.cn/cn/flfg/flfg/fl/webinfo/2018/02/1517179403232169.htm
General Provisions of the Civil Law of the People’s Republic of China	http://www.czce.com.cn/cn/flfg/flfg/fl/webinfo/2018/02/1517179403089226.htm
Contract Law of the People’s Republic of China	http://www.czce.com.cn/cn/flfg/flfg/fl/webinfo/2018/02/1517179403182794.htm
Regulation on the Administration of Futures Trading	http://www.czce.com.cn/cn/flfg/flfg/xzfg/webinfo/2018/02/1517179405950006.htm
Interim Procedures on Administration of Securities and Futures Investment Consultancy	http://www.czce.com.cn/cn/flfg/flfg/xzfg/webinfo/2018/02/1517179407708174.htm
Measures for the Administration of Futures Practitioners	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/08/1533010809155661.htm
Measures for the Anti-money Laundering Work in the Securities and Futures Sectors	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408467684.htm
Measures for the Suitability Management of Securities and Futures Investors	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408415214.htm

Interim Measures for the Supervision and Administration of Integrity in the Securities and Futures Markets	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408362381.htm
Interim Administrative Provisions on the Operation of the Private Asset Management Business of Securities and Futures Institutions	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408307408.htm
Measures for the Administration of the Futures Investor Protection Fund	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408265129.htm
Measures for the Pilot Program of the Asset Management Business of Futures Brokerages	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408106472.htm
Measures for the Supervision and Administration of Futures Brokerages	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408041757.htm
Measures for the Administration of Risk-Based Regulatory Indicators of Futures Brokerages	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179407972041.htm
Measures for the Administration of Futures Exchanges	http://www.czce.com.cn/cn/flfg/flfg/bmgz/webinfo/2018/02/1517179408170820.htm
Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Futures Dispute Cases	http://www.czce.com.cn/cn/flfg/flfg/sfjs/webinfo/2018/02/1517179407775347.htm
Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Futures Dispute Cases (II)	http://www.czce.com.cn/cn/flfg/flfg/sfjs/webinfo/2018/02/1517179407841487.htm
Bylaws of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcyjwgz/zc/H77050301index_1.htm
Trading Rules of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcyjwgz/jygz/webinfo/2021/03/1605580990274295.htm

Measures for the Administration of Risk Control of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2021/02/1605578915638135.htm
Measures for the Administration of Registered Receipts of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/lbb/webinfo/2021/02/1605578915418264.htm
Detailed Rules for Futures Delivery of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/lbb/webinfo/2021/02/1605578916500945.htm
Measures for the Administration of Market Maker of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2020/09/1597087278368206.htm
Measures for the Administration of the Futures Trading of Futures Brokerage Members Appointed by Overseas Brokers	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/11/1538464114908586.htm
Detailed Rules for Implementation of Bonded Delivery of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2020/09/1597085637190819.htm
Detailed Rules for Futures Trading of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2021/02/1605580473776097.htm
Detailed Rules for Futures Clearing of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2020/09/1597085638079690.htm
Measures for the Administration of Accounts Involving Actual Controlling Relationship of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/11/1538464113375485.htm
Measures for the Administration of Hedging Activities of Zhengzhou Commodity Exchange	www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2021/04/1605585471336759.htm
Measures for Penalties for Violations of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/11/1538464112702417.htm

Detailed Rules for Night Trading Session of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/11/1538464112609733.htm
Measures for the Administration of Abnormal Trading Behaviors of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/11/1538464112496240.htm
Measures for the Administration of Depository Banks Designated by Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2019/04/1545642673350743.htm
Measures for the Administration of Designated Delivery Warehouses of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2021/01/1605576321637904.htm
Measures for the Administration of Memberships of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2020/07/1597082176316501.htm
Measures for the Administration of Designated Factory Warehouses of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/07/1517179559726826.htm
Measures for the Administration of Arbitrage Trading of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2018/03/1517179665698051.htm
Measures for the Administration of Option Trading of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2020/09/1597087278140287.htm
Measures for the Administration of Integrated Services Platform of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2019/04/1545642672316986.htm
Measures for the Administration of Trader Suitability Requirements for Futures Trading of Zhengzhou Commodity Exchange	http://www.czce.com.cn/cn/flfg/zcjywgz/ssxz/webinfo/2019/06/1558749417526300.htm

VI. Disclaimer

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