INE

上海国际能源交易中心

SHANGHAI INTERNATIONAL ENERGY EXCHANGE

上海期货交易所成员单位 AN SHFE COMPANY

Shanghai International Energy Exchange

CPSS-IOSCO Principles for Financial Market Infrastructures

Information Disclosure

December 2018

Contents

Responding institution: Shanghai International Energy Exchange

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

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

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Report available at: www.ine.cn

For more information, please contact: +86 (21) 68400000

I. Executive Summary

The Shanghai International Energy Exchange (hereinafter referred to as 'INE' or the 'Exchange') is a Central counterparty ('CCP') that daily clears Members' trades and, according to trading results and its applicable rules, calculates and transfers Members' trading margin, gains and losses, transaction fees, delivery payment, and other amount.

INE classifies its Members into Futures Firm Members (the 'FF Members') and Non-Futures Firm Members (the 'Non-FF Members'). INE may admit special Members as necessary for its trading, clearing or so. Margin requirements are implemented for futures trading. The Exchange conducts clearing with Members. Each Member conducts clearing with its own Clients, Overseas Special Participants ('OSPs') who authorize the Member to conduct clearing, and Overseas Intermediaries who authorize the Member to conduct trading and clearing (Clients, OSPs and Overseas Intermediaries are collectively referred to as the 'Clearing Delivery Principals'). The Overseas Special Brokerage Participants ('OSBPs') and Overseas Intermediaries clear with their Clients.

INE adopts a tiered risk management structure, under which INE shall monitor and manage the risks of the Members, each Member shall monitor and manage the risks of its Clearing Delivery Principals, and each FF Member OSBP, Overseas Intermediary shall monitor and manage the risks of its Clients. In addition, INE introduces a CCP centralized clearing mechanism to mitigate market risks and to improve market efficiency.

Designated banks which engage in futures margin depository business (the 'Designated Depository Banks') are prudentially designated by INE to engage in futures margin depository services. A Designated Depository Bank should assist INE in providing margin depository and transfer services, comply with applicable laws, regulations, and INE's market rules, and submit to INE's supervision and management.

INE currently designates 13 Depository Banks: the Bank of China, the Agricultural Bank of China, the Industrial and Commercial Bank of China, the China Construction Bank, the Bank of Communications, the Shanghai Pudong Development Bank, the Industrial Bank, the China Everbright Bank, the China Merchants Bank, the China CITIC Bank, the China Minsheng Bank, the PingAn Bank, and the DBS Bank, all of which are reputable, financially robust national or joint-stock commercial banks that feature nationwide coverage, advanced inter-city funds transfer technologies, established margin management rules, competent technical experts and a sound record of the depository business.

INE manages margin on a separate basis to prevent risks. INE opens a dedicated settlement account with every above-mentioned Designated Depository Banks for depositing Members' margin and relevant amount; a Member opens a dedicated fund account with a Designated Depository Bank for depositing its members' margin and relevant amount. The transfer of funds between the INE and a Member involved in futures trading is executed through INE's dedicated settlement account and the Member's dedicated fund account. Furthermore, INE manages the margin deposited by a Member to its dedicated settlement account on a separate basis and sets up an account for each Member to daily record and verify the deposits, withdrawals, gains and losses, trading margin, and transaction fees of the Member. An FF Member, OSBP, and Overseas Intermediary manages the margin on a separate basis and sets up an internal ledger for each Client to daily record and verify the deposits, withdrawals, gains and losses, trading margin, and transaction fees of the Client. In addition, INE may collect any receivables through direct deduction from the dedicated fund account of a Member without any notice and may access at any time the balance and transaction history of the account for potential risk identification and control at an early stage.

Designated Delivery Storage Facilities include the warehouses and the factories. Warehouse refers to a facility of a licensed commodity storage enterprise which has been approved and designated by INE for the physical delivery of a certain commodity futures. Factory refers to a facility of a producer which has been approved and designated by INE for the physical delivery of a certain commodity futures. The Designated Delivery Storage Facilities should be announced separately upon the verification and approval of INE. A Designated Delivery Storage Facility is required to establish a separate account for each underlying commodity and designate dedicated staff to be in charge of the physical delivery. The Designated Delivery Storage Facility is subject to internal audit as well as random and annual inspection by INE and should pay delivery risk deposit to the INE to guarantee the performance of its obligations.

Legal and regulatory frameworks.

INE conducts various businesses on a fairly solid basis of legal framework. The legal standards are clearly stipulated, well understood, and highly consistent with rules, procedures, and contracts of the Exchange. The whole set of the arrangements have been well implemented and obeyed, constituting a sound basis for INE to perform its role as a CCP.

As the futures regulator under the State Council, China Securities Regulatory Commission (CSRC) regulates China's futures market, while the China Banking and Insurance Regulatory Commission (CBIRC) serves as the regulator of the banking and insurance industries. Under the CSRC's regulation, INE organizes futures trading on a transparent, fair, and just basis with market integrity, develops business management rules, implements self-regulation, publishes market information, and provides Members with technologies, trading venues and facilities as well as other relevant services.

Main risks and risk management. As a CCP, INE shoulders a wide range of potential internal or external risks that may arise from itself or from its participants, Clients, or other entities. These risks mainly include legal risk, credit risks, liquidity risks, physical delivery risks, general business risks, investment and custody risks, operational risks, and violation risks.

INE has established a robust risk-management framework: the Risk Management Committee under the Board of Directors (or the 'Board') participates in decision making which involves INE's risk control and management (with duties shared by the Risk Management Committee under SHFE Board of Directors); INE adopts supporting detailed rules and measures to comprehensively manage credit, liquidity, delivery, and other risks facing it in daily operations. Internal departments including the Trading Department, the Clearing Department, the Legal Affairs Department, the Market Compliance Department, and the Market Promotion Department as well as various business systems, are committed to jointly and closely monitoring changes in risk intensity and market environment and, in response thereto and according to policy-making rules, update relevant policies and procedures; and the Risk Management Department and the Risk Management Working Group are devoted to inspecting, assessing, and addressing risks and to making risk control decisions. Total credit risk exposure can be identified and quantified at the exchange level. Comprehensive risk-management framework can identify, monitor, and address the risks exposure of the Exchange per se as well as participants and established specific rules to respond to emergencies. In addition, INE addresses potential operational risks by: (1) creating a cyber security system and information security strategies under ISO 27001; (2) managing growing capacity needs of various systems through the standard capacity management process set out in ISO 20000; (3)

setting system operational stability goals; (4) enhancing employees' risk awareness; (5) adopting a two-staff, double-check mechanism; (6) developing evaluation indicators for operation; (7) conducting internal inspections and external evaluations; (8) executing agreements with utility providers; (9) building a monitoring system; (10) 24hr facility check and building environment inspection; (11) carrying out emergency drills; and (12) setting up disaster recovery backup centers.

Clearing. INE implements a daily mark-to-market system and conducts clearing at the end of each day, which should be completed before market open on the following trading day as required by applicable laws and supporting business rules. After the clearing deadline set by such laws and rules, payment and transfer instructions will become irrevocable and the deadline will not be subject to any extension. Moreover, INE has an effective margin model in place that is designed to cover participants' credit risk exposures from various products with a high degree of confidence level; set out detailed and prudent rules on the type, haircut, and concentration limit of the assets acceptable as margin. These assets are required of high credit and liquidity and to be valued on a daily mark-to-market basis. INE built a flexible warrant management system that can identify the standard warrants of each Client to ensure the security of collateral assets.

Market surveillance. INE conducts look-through regulation based on the system of one account dispatched with one trading code. As a Client's open interests and collaterals are recorded under his trading code and separated from those of other Clients, INE's systems can accurately and easily identify each Client's assets to facilitate the monitoring by the China Futures Market Monitoring Center (CFMMC). In the case of participant default, INE may invoke effective and clearly defined rules and procedures for management thereof by taking timely actions, discharging the settlement obligations, and addressing the problem of resources replenishment. Lastly, INE may identify a participant violation through an internal real-time monitoring system, investigate the violation and penalize the entity concerned according to relevant rules and, under serious circumstances, timely report to CSRC for formal filing and investigation. A violation constituting a crime will be referred to the judicial authority for criminal prosecution.

Disclosure of rules, key procedures, and market data. INE accomplishes this end by: (1) periodically holding Members' Assembly and member forums and timely seeking and analyzing opinions and suggestions from the market to meet the needs of participants and the market; (2) promptly providing solutions to participants after evaluating the opinions and suggestions received through multiple channels; (3) timely improving its businesses, rules, and systems to adapt to the changes in market needs; (4) conducting sufficient full-market testing in advance and organizing training programs for new systems or to-be-launched businesses; and (5) disclosing basic data, service charges, discount policies, circular and announcements, and regulatory information to the market through its official website and the member service system.

II. Summary of Major Changes Since Last Disclosure

N/A.

III. Background on INE

- **General Description of INE and the Markets It Serves**

Approved by CSRC, INE is a self-regulated legal person in the futures market which is established pursuant to the *Company Law*, the *Regulations on the Administration of Futures Trading*, the *Measures on the Administration of Futures Exchanges*, and other relevant rules. Based on the principles of 'openness, fairness, and impartiality', INE is devoted to establishing a sound global trading platform for energy derivatives that is internationalized, market-oriented, rule-of-law-based, and professional to objectively reflect the supply and demand of energy market, provide a tool in price discovery, risk management and asset management for energy producers, distributors, consumers and investors, so as to facilitate the optimal allocation of energy resources and promote the economic growth.

As a demutualized exchange with a registered capital of ¥5 billion, INE is jointly established by the Shanghai Futures Exchange and the Shanghai Futures Information Technology Co., Ltd. According to the *Articles of Association of Shanghai International Exchange Co., Ltd (*the *'INE Articles of Association'),* INE, as a self-regulated legal person, has set up a governance structure comprising the Shareholders' General Meeting, the Board of Directors, and the Supervisory Board.

The Shareholders' General Meeting, consisting of all shareholders, is INE's highest authority. The Board of Directors is the standing presence of and reports to the Shareholders' General Meeting. The Supervisory Board is INE's supervisory body and reports to the Shareholders' General Meeting. INE has one Chief Executive Officer who is responsible for its daily management. By the end of 2018, INE has admitted 156 Members (149 FF Members and 7 Non-FF Members), 45 Overseas Intermediaries, and approved 1,192 trading seats nationwide. In March and November 2018, INE completed the Automated Trading Services (ATS) registration in Hong Kong and the Recognized Market Operator (RMO) registration in Singapore, allowing local eligible institutions and individuals to engage in trading on INE.

INE listed crude oil futures contracts on March 26, 2018. As of December 31, on a single-sided basis, INE achieved in 2018 a total trading volume of 26.5094 million lots and a total turnover of ¥12.74 trillion, reflecting active transactions and robust market growth.

With a robust computer trading system, INE ensures real-time, secure, and reliable frontline and remote trading via large capacity fiber dedicated lines, access to other Commodity/ Futures Exchanges, and other communication technologies; and effects with a central database synchronous transmission and exchange of data of and from clearing, funds, delivery, inter-city delivery storage facilities, and risk monitoring systems.

As a CCP, INE clears trades through its internal Clearing Department which clears futures trades conducted on INE, manages margin, and prevents clearing risks. Specifically, the Department fulfills the following duties: (1) controlling clearing risks; (2) producing settlement statements for Members; (3) transferring funds; (4) record and report all cleared trades and related statistics, settlement and purchase of foreign exchanges and other activities; (5) resolving funds disputes among Members with respect to futures transactions; (6) conducting delivery settlement; (7) managing margins as prescribed; and (8)conduct other clearing business in accordance with the applicable rules of the Exchange

INE implements margin requirements and a daily mark-to-market system, under which it clears trades with Members and Members clear trades with their Clients on a daily basis; and adopts a physical delivery system that requires delivery of the underlying product against the maturity of a futures contract within a prescribed limit. Delivery-related services are provided by Designated Delivery Storage Facilities, and Clients may handle deliveries only through Members of the Exchange.

INE releases real-time and delayed market data through domestic and foreign authorized information agencies by a satellite broadcasting network and a public telecom network; offers dynamic market data consulting services through a real-time messaging service system and a telephone quotation service system; timely publishes statistics and relevant information on trading, delivery, open interest, and inventory, among others on its official website (http://www.ine.cn/); and provides Members, OSP, Overseas Intermediaries, investors, and the public with consultation, training, and other services in the form of media report, telephone communications, and diverse training and exchange programs.

- **Organization and Governance Structure**

Pursuant to the *Measures on the Administration of Futures Exchanges* and the *INE Articles of Association*, INE's Board of Directors and senior management adopt the following governance arrangement: the Shareholders' General Meeting, comprised of all shareholders, is the highest authority of INE and holds annual meetings and interim meetings. The shareholders' annual general meeting should be convened once a year within six months after the end of the previous accounting year. The Board of Directors, which consists of five to nine directors, including one Board Chairman and one Board Vice Chairman, is the standing presence of and reports to the Shareholders' General Meeting. The Chairman and Vice Chairman of the Board are elected by more than half of all the directors. The Board Chairman may not concurrently serve as the President and Chief Executive Officer. INE has independent director(s), who is (are) elected by the Shareholders' General Meeting. The term of office of each director is three years. A director may serve consecutive terms upon re-election. Special committees, including the Strategic Planning Committee and the Remuneration Committee, are established under the Board of Directors to assist the Board in performing its duties. Each special committee reports to and performs duties as prescribed by the Board.

INE has a Supervisory Board consisting of no less than three supervisors. The Supervisory Board has one Chairman who is elected by more than half of all the supervisors. Directors or members of the senior management may not concurrently serve as supervisors. The Supervisory Board includes the shareholder supervisors and at least one third staff supervisors. A shareholder supervisor is elected by the Shareholders' General Meeting, and a staff supervisor is elected by the INE's staff through the staff representatives' general meeting, the staff's general meeting or otherwise. The term of office for each supervisor is three years. A supervisor may serve consecutive terms upon re-election.

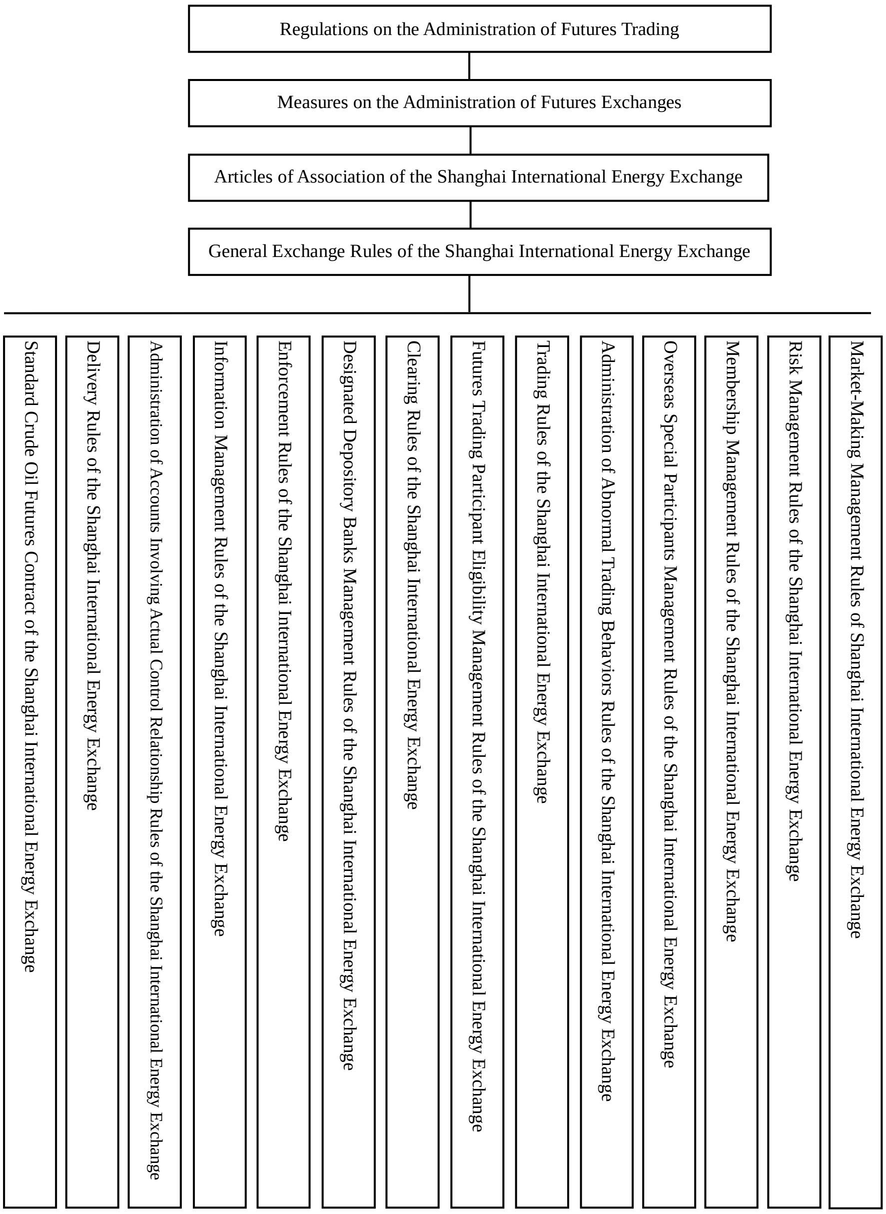
INE has one Chief Executive Officer who is responsible for its day-to-day management and several Executive Vice Presidents. The Chief Executive Officer is appointed and dismissed by the Board of Directors. The Executive Vice Presidents are appointed and dismissed by the Board of Directors upon the nomination of the President and Chief Executive Officer. INE governs multiple functional departments including General Administration Department, Risk Management Department, Market Compliance Department, Trading Department, Clearing Department, Delivery Department, Operation Department, Member Services and Investor Education Department, Commodity Department I, Commodity Department II, Market Promotion Department, Legal Affairs Department, International Business Department, Information Management Department, and other functional departments.

- **Legal and Regulatory Framework**

China's financial market adopts an industry-based regulatory model: CSRC under the State Council regulates the futures market, while CBIRC serves as the regulator of the banking and insurance industries.

Under the supervision of CSRC's regulation, INE organizes futures trading on a transparent, fair, and just basis with market integrity, formulates business management rules, implements self-regulation, publishes market information, and provides participants with technologies, trading venues and facilities as well as other services.

INE has, in accordance with the *Regulations on the Administration of Futures Trading* released by the State Council and the *Measures on the Administration of Futures Exchanges* and the *Interim Measures for the Administration of Overseas Traders' and Overseas Brokers' Engagement in the Trading of Specified Domestic Futures Products* released by the CSRC, developed a complete set of rules, policies, and systems to fully cover the trading operations and management of futures market, such as trading, clearing, delivery, membership management, risk control, warrant management, and handling of violations.



Market access. Normative documents on market access include the *Regulations on the Administration of Futures Trading*, the *Measures for the Supervision and Administration of Futures Firms*, the *INE Articles of Association*, the *Membership Management Rules of the Shanghai International Energy Exchange* (the '*INE Membership Management Rules*'), and the *Overseas Special Participant Management Rules of the Shanghai International Energy Exchange* (the '*INE Overseas Special Participant Management Rules*'), which cover the requirements for establishing a futures firm and the review process thereof, application qualifications for INE Members, OSPs, and Overseas Intermediaries, rights and obligations of a Member, definitions of eligible market participants, etc.

Contracts. Normative documents on futures trading contracts include the *Regulations on the Administration of Futures Trading*, the *Measures on the Administration of Futures Exchanges*, and the *INE Articles of Association*, which specify INE's responsibilities in and corresponding review processes for designing, listing, amending, and terminating trading contracts.

Trading. To regulate its trading, clearing, delivery, risk control, and other trading-related activities, INE has, in accordance with applicable laws, regulations, policies, and its *Articles of Association*, formulated the *General Exchange Rules of the Shanghai International Energy Exchange* (the '*INE General Exchange Rules*'), which binds upon INE, its Members, OSPs, Overseas Intermediaries, investors, Designated Delivery Storage Facilities, Designated Depository Banks margin and their respective staff.

To implement the *INE General Exchange Rules*, INE further promulgated the *Trading Rules of the Shanghai International Energy Exchange* (the *'INE Trading Rules'*) by detailing matters such as trading seat, trading floor, remote trading, price, trading code, and information disclosure. The *Trading Rules* is binding on INE, its Members, OSPs, Overseas Intermediaries, and their Clients.

Clearing. To regulate its clearing activities, INE has, in accordance with the *INE General Exchange Rules*, developed the *Clearing Rule of the Shanghai International Energy Exchange* (the *'INE Clearing Rules'*), which binds upon INE, its Members, OSPs, Overseas Intermediaries, their Clients, depositary banks, and their respective staff. INE implements margin requirement, daily mark-to-market, and risk reserve fund systems for its clearing, and clears trades for the Members only, while each Member, within its authorization scope, clears trades for its OSPs, Overseas Intermediaries, and Clients, and OSPs and Overseas Intermediaries clear for their Clients.

Delivery. To regulate its delivery activities, INE has, in accordance with the *INE General Exchange Rules*, formulated the *Delivery Rules of the Shanghai International Energy Exchange* (the *'INE Delivery Rules'*) which binds upon INE, its Members, OSPs, Overseas Intermediaries, Designated Inspection Agencies, Clients, and Designated Delivery Storage Facilities.

Chapter 10 (Delivery of Crude Oil Futures Contract) of the *INE Delivery Rules* sets out special provisions on delivery arrangement for crude oil futures; Chapter 7 (Management of Designated Delivery Storage Facilities) thereof regulates futures activities of Designated Delivery Storage Facilities, which binds on such storage facilities and their staff; Chapter 8 (Management of Standard Warrants) thereof aims to enhance the management of standard warrant and ensure INE's normal operation of futures delivery services. When dealing with standard warrant-related business, INE, its Members, OSPs, Overseas Intermediaries, Clients, Designated Delivery Storage Facilities, and any other standard warrant business participants should comply with said provisions.

Risks and responsibilities. INE has, in accordance with the *General Exchange Rules*, formulated the *Risk Management Rules of the Shanghai International Energy Exchange (*the *'INE Risk Management Rules'),* which binds upon INE, its Members, OSPs, Overseas Intermediaries, and their Clients. For risk management, INE implements the margin requirement, the price limit, the position limit, the large trader position reporting, the forced position liquidation, and the risk warning.

Supervision and enforcement. INE has, in accordance with its *Articles of Association* and the *INE General Exchange Rules*, formulated the *Enforcement Rules of the Shanghai International Energy Exchange (*the *'INE Enforcement Rules')*. The term 'rule violation' therein refers to the breach of the *INE General Exchange Rules*, implementing rules, and any other provisions of INE by Members, OSPs, Overseas Intermediaries, Clients, Designated Delivery Storage Facilities, Designated Depository Banks, Designated Inspection Agencies, information service vendors, any other futures market participants. INE investigates, identifies and deals with irregularities based on factual evidence and in adherence to the principles of fairness and impartiality. A violation that constitutes a crime will be referred to the judicial authority for criminal prosecution. Should punishment have been imposed for a violation by the CSRC, INE may, at its discretion, grant mitigation or relief of the otherwise imposable penalty.

Emergency response. INE may declare a state of emergency according to the *General Exchange Rules* if during futures trading occurs earthquake, flood, fire, computer system breakdown, and other circumstances not attributable to INE which lead to failure of normal trading; abnormal movement of futures price, such as price continuously reaching its limits, leading to large-scale losses of Clients, even the risk of forced position liquidation; excessive position held by a small number of Members or Clients; Members' risk of settlement; delivery default, etc.

INE may take the following emergency actions to mitigate and release the risks: delaying the opening of the market, suspending trading, adjusting price limit, increasing trading margin, reducing position size to a designated extent within a specified time limit, forced position liquidation, and so on.

- **System design and operation**

INE provides trading, clearing and physical delivery services with its in-house designed and developed electronic trading platform, which boats a processing speed at 50,000 orders/second and huge upgrading potential as well as adaptability eyeing at the future. INE has established 3 data centers in Shanghai and Beijing, with the world-class 'derivatives R&D and data processing center' as its signature. With the adoption multi-pairs of fibers of various diameters, INE manages to realize reliable operation with core business system functioning as back-up for each other.

INE has set up a Clearing Department to provide clearing service for the products listed on INE. INE implements daily mark-to-market and the risk reserve systems for its clearing activities, while for risk management, has adopted the margin requirement, price limits, position limits, large trader position reporting, forced position liquidation, risk warning, etc. INE adopts a tiered risk management structure, under which INE shall monitor and manage the risks of the Members, each Member shall monitor and manage the risks of its Clearing Delivery Principals, and each FF Member OSBP, Overseas Intermediary shall monitor and manage the risks of its Clients.

INE implements the following systems for the clearing business: the clearing management system, the risk assessment system, the futures funds management system, the Standard Warrant Management System, the delivery system, etc. To be specific:

Clearing Management System. This system clears the gains and losses, trading margin, transaction fees, taxes and other fees for each Member based on the daily settlement price of each contract, transfers the net balance of the Member's receivables and payables, and correspondingly increase or decrease the Member's clearing deposit. It also provides the Members with relevant data and information such as settlement prices, positions, settlement parameters, and transaction fees on a daily basis. In addition, it ensures the normal operation of the clearing business by supporting the management of core businesses such as funds deposit and withdrawal, collateral margin, physical delivery and so on.

Risk Assessment System. This system is designed to timely monitor the rights and interests, gains and losses and potential financial pressure of each Member. With this system, INE's risk management personnel can conduct intra-day real-time clearing and post-trading stress test to dynamically evaluate the fund risks both of any Member and across the entire market; various simulation scenarios can be created for the stress test for different specific situations, and more than one assessment method is supported. The assessment results can be released to appropriate decision makers or market participants in a timely manner, thus strengthening INE's ability to manage the Members' settlement fund risks. In terms of delivery risk management, the system may be used to timely identify abnormal accounts or potential delivery risks at the time near delivery, thereby ensuring the smooth delivery.

Futures Fund Management System. As an electronic fund platform linking INE, Members, OSPs, Overseas Intermediaries, and Designated Depository Banks, this system has realized the real-time reporting, approval, and tracking of the transfer of futures funds. It features safety, high efficiency and convenience, and to a considerable extent, has reduced the operating costs, improved the operational efficiency of futures funds, and enhanced INE's monitoring of the fund flow risk.

Standard Warrant Management System. As a comprehensive warrant management platform linking INE, Members, OSPs, Overseas Intermediaries, delivery storage facilities, and quality inspection agencies, this system has realized the e-management of the delivery notice, warrant registration, transfer, margin collateral service, cancellation as well as the product reporting, inspection and so on, thus improving the delivery efficiency and ensuring the safety of warrants. Meanwhile, this system can daily mark margin collateral to market, and automatically adjust the amount of the margin converted from collateral according to market situations, thus ensuring the smooth management of margin collateral.

Delivery System. This system is a comprehensive physical delivery management platform linking INE, OSPs, Overseas Intermediaries, and Members, through which, the Members participating in physical delivery submit to INE warrants for delivery and delivery intentions, and INE collects market's delivery intentions and matches warrants between the Members. In addition, it is also used for calculating the costs relevant to the delivery business, which in turn ensures smooth physical deliveries.

IV. Principle-by-Principle Summary Narrative Disclosure

This part set outs INE's summary narrative disclosure for each applicable principle.

Principle 1: Legal basis

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

Key consideration 1: The legal basis should provide a high degree of certainty for each material aspect of an FMI's activities in all relevant jurisdictions.	As a futures exchange subject to the centralized and uniform regulation of CSRC, INE organizes futures trading as approved by CSRC and conducts self-regulation in the futures market in the capacity of a legal person. CSRC is China's competent government authority for futures regulation, supervision, while the China Futures Association (CFA), a non-profit association which accepts the guidance and management of CSRC, serves as a bridge that links government and securities and futures industry, safeguards the legitimate rights and interests of its members, and strives to maintain an orderly competition in the securities and futures industry. As a CCP providing clearing services for commodity futures trading, INE requires a high degree of legal certainty for the following businesses: novation, interests in financial instruments, settlement finality, netting settlement, collateral arrangement (including margin arrangement), default procedures, and segregation and prompt disposal of margin assets. Currently, all of INE's key businesses are conducted within the People's Republic of China, which should be deemed 'all relevant jurisdictions' for the purposes hereof. Legal basis of CCP. INE operates its business under a legal framework that comprises laws, administrative regulations, ministry-level rules, judicial interpretations, its *Articles of Association* and implementing rules, etc. The legal basis includes: (1) the *General Provisions of the Civil Law*, the *Company Law*, the *Securities Law*, the *Contract Law*, the *Property Law*, and the *Guaranty Law,* as well as other basic laws promulgated by the National People's Congress or its Standing Committee; (2) the *Regulations on the Administration of Futures Trading* promulgated by the State Council; and (3) the *Measures on the Administration of Futures Exchanges*, the *Measures for the Supervision and Administration of Futures Firms*, among others, promulgated by CSRC. The *Regulations on the Administration of Futures Trading*, formulated by the State Council with delegation by NPC, is of equal legal force with laws promulgated by the latter; the *Interim Measures for the Administration of Overseas Traders' and Overseas Brokers' Engagement in the Trading of Specified Domestic*

	Futures Products, a ministry-level rulebook developed by CSRC, expressly establishes INE's legal status as a CCP. In practice, the foregoing laws and regulations have all been well enforced and complied with. INE is a demutualized futures exchange and its legal status, rights and obligations, governance structure, and other aspects are governed by the *Company Law*, the *Securities Law*, and other applicable laws. The legal basis for INE's role as a CCP is formed by the doctrine of freedom of contract and the general assignment of rights and obligations under the *Contract Law* which operates with an effect similar to novation. According to the doctrine of freedom of contract, the parties to a contract may freely define the terms of the contract and their respective rights and obligations. The validity of a contract will be recognized as long as its terms do not contravene the mandatory laws and regulations or public interests; while general assignment of rights and obligations may find its basis in Article 88 of the *Contract Law*, which provides that 'Either party may, subject to the consent of the other party, assign its rights together with its obligations under the contract to a third party'. The legal status of INE as a CCP is affirmed by the following provisions: according to Article 10 of the *Regulations on the Administration of Futures Trading*, 'A futures exchange shall provide centralized performance guarantee for futures trading'; Article 33 requires that, 'The clearing of futures trading shall be centrally organized by the futures exchange'; Article 15 of the *Interim Measures for the Administration of Overseas Traders' and Overseas Brokers' Engagement in the Trading of Specified Domestic Futures Products* states that 'Futures exchanges that perform the functions of clearing shall, acting in the capacity of a central counterparty, organize the clearing of trades in specified domestic futures products…' The term 'central counterparty' as used in the preceding paragraph shall refer to a legal person who, upon conclusion of futures transactions, interposes itself between the trading parties, becoming the buyer to every seller and the seller to every buyer, and who performs clearing on a net basis, to provide centralized performance guarantee for such futures trading. Furthermore, the *Futures Law*, presently a draft legislation, expressly sets out that a futures clearing institution should, as the central counterparty in futures trading, interpose itself between the trading parties upon the consummation of futures transactions, becoming the seller to every buyer and the buyer to every seller, and assume their rights and obligations under futures

	trading to provide centralized performance guarantee for futures trading. Enforceability of the netting arrangement. The legal basis of the netting settlement can be found in the right of set-off under the *Contract Law* and the daily mark-to-market system implemented in futures trading. Article 99 of the *Contract Law* states that, 'Where two parties owe to each other debt obligations that have fallen due, and of which the subject matters are identical in type and quality, either party may set off its obligations against those of the other party except where such set-off is prohibited by law or by the nature of the contract.' Article 100 provides that, 'Where two parties owe to each other debt obligations that have fallen due, and of which the subject matters are not identical in type and quality, the parties may still choose to effect set-off by mutual agreement.' According to Article 33 of the *Regulations on the Administration of Futures Trading*, a futures exchange is required to implement a daily mark-to-market system, allowed to arrange transaction netting, and authorized to establish relevant frameworks. Article 32 of the *INE Clearing Rules* stipulates that, 'After the close of each trading day, the Exchange will settle the gains and losses, trading margin, transaction fees, taxes, and other fees for each Member based on the settlement price of each contract, and conduct a transfer of the net balance of the Member's receivables and payables by increasing or decreasing the Member's clearing deposit accordingly.' Collateral arrangement. INE disposes of margin in the form of pledge of movables or pledge of rights. Both currencies and documents of title, such as warrants and treasury bonds, can be the subject matter of a pledge upon approval. According to Article 85 of the *Interpretation of the Supreme People's Court on Issues concerning the Application of the Guaranty Law of the People's Republic of China*, '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 specified, to the creditor as performance guarantee, said creditor shall be given priority in receiving payment with such amount if said debtor defaults.' The foregoing article provides legal ground for currencies as futures margin. Article 223 of the *Property Law*, which provides that 'The following rights which a debtor or a third party is entitled to dispose of may be pledged: bills of exchange, checks, promissory notes, bonds, certificates of deposit, warrants, bills of lading…', constitutes the legal basis for the acceptance of non-currencies such as treasury bonds, standard warrants, and other documents of title as futures margin.

	Default handling. To protect the rights of the non-defaulting party, INE enforces corresponding remedies including pecuniary damages for defaults during the course of trading and delivery. Article 107 of the *Contract Law* 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 such obligations, remedying such breach, or compensating for losses thus caused', providing the legal basis for INE to handle defaults during the course of trading and delivery. Settlement finality. Article 33 of the *Regulations on the Administration of Futures Trading* provides that 'A futures exchange shall implement a daily mark-to-market system, and shall timely inform its members of the clearing results on the very day of their transactions; and a futures firm shall clear for its customers according to the clearing results of the futures exchange, and timely inform them of the clearing results in the agreed manner.' Under Article 57 of the *Measures for the Supervision and Administration of Futures Firms*, 'A futures firm shall provide transaction clearing reports to customers after close of trading each day. Customers may access such reports at such time and in such manner as stipulated in applicable futures brokerage contract. The futures firm shall clear customer transactions on the very day thereof based on the clearing results provided by the relevant futures exchange or another qualified clearing service provider. The content, format, treatment, and date of the clearing items shall be fully consistent with those of the futures exchange.' Article 27 of the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases* stipulates that, 'The customer's confirmation of the transaction clearing results of a given day 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 such confirmation shall be solely assumed by the customer.' Additionally, Article 32 of the *Measures for the Supervision and Administration of Futures Firms* provides that, 'In the event of dissolution or bankruptcy, a futures firm shall first properly handle customers' margin funds and other assets and settle its futures businesses.' The *Provisions on the Resolution of Securities Firm Risks* also set out relevant articles regarding settlement finality. These provisions form the legal basis for settlement finality. Pursuant to Article 134 of the *Enterprise Bankruptcy Law*, the application for

bankruptcy of a financial institution should be made by the financial regulator under the State Council; while according to Article 10 regarding bankruptcy acceptance procedures, the period from the filing of a bankruptcy application to the acceptance of the case should in general be no less than 30 days. These provisions give reasonable assurance that financial institutions are generally not susceptible to abrupt bankruptcy, which means settlement finality would not be affected.

Margin segregation. Article 28 of the *Regulations on the Administration of Futures Trading* states that 'Margin funds collected by a futures exchange from its members or a futures firm from its customers… shall be deposited in a separate account and segregated from its proprietary capital. The margin funds collected by a futures exchange from a member shall belong to the member and not be used for any purpose other than for clearing for that member.' The foregoing article provides legal protection to INE with regard to the margin funds and positions of market participants.

In addition, Article 109 of *Enterprise Bankruptcy Law* prescribes that, 'A creditor secured by the specific property of the bankrupt shall enjoy the priority in being repaid with such specific property.' Therefore, when an enterprise engaged in futures trading goes bankrupt, INE has the priority over other creditors with respect to repayment with the margin funds deposited by that enterprise.

Prompt disposal of collateral. Pursuant to Article 71(2) of the *Guaranty Law*, where the conditions for enforcement of the pledged interest are met, INE is entitled to a corresponding portion of the margin assets in accordance with relevant agreements, or to enjoying priority of repayment with the sales proceeds of documents of title including standard warrants.

The legal basis for the collateral and margin arrangement, especially for the collection of margins and for the prompt disposal thereof when futures participants are under-margined, can also be found in Chapter 17 (pledge) of the *Property Law*. For instance, Article 208 provides that, 'A debtor or a third party may, for guaranteeing the debtor's repayment of debts, pledge his (its) movable properties to, and place them under the custody of, the creditor, who shall enjoy priority of repayment with such properties in the event that the debtor fails to fulfill obligations when they become due or when such conditions for enforcement of the pledged interest as agreed by the parties are met.'

Key consideration 2: An FMI should have rules, procedures, and contracts that are clear, understandable, and consistent with relevant laws and regulations.	Clear and understandable rules, procedures, and contracts. INE's rules, procedures, and contracts are published on its official website and are available to the public. In addition, INE extensively solicits comments and advices from relevant participants before and when drafting a rule, procedure, or contract and, before the implementation thereof, shares relevant legal opinions and analysis with relevant market participants through public representations, video seminars, and other methods, so as to ensure its rules, procedures, and contracts are clear and understandable. Consistent rules, procedures, and contracts. INE formulates or amends its rules, procedures, and contracts in accordance with existing laws and regulations, and ensures their consistencies therewith by seeking legal opinions or conducting in-depth analyses. At present, there is no inconsistency between the rules, procedures and contracts of INE and applicable laws, regulations, and ministry-level rules. Review or assessment of rules, procedures, and contracts. As an established practice, before releasing or amending its business rules, INE conducts a fair competition review by assessing their impacts on market competition against the *Anti-Monopoly Law* and its supporting rules, in order to not inadvertently preclude or stifle competition. According to Article 93 of the *Measures on the Administration of Futures Exchanges*, 'Where a futures exchange formulates or amends its articles of association or general exchange rules; or lists, suspends, cancels, or re-lists any trading product; or lists, modifies, or terminates any contract, prior approval of CSRC shall be obtained.' Article 95 provides that 'A futures exchange shall seek the opinions of CSRC for proposed formulation or modification of the implementing rules to its general exchange rules, and file a report with CSRC before official release and implementation thereof.' In practice, the foregoing laws and regulations have been well enforced and complied with.
Key consideration 3: An FMI should be able to articulate the legal basis for its activities to relevant authorities, participants, and, where relevant, participants' customers, in a clear and	The legal basis for INE's activities chiefly comprises applicable laws, regulations, rules, procedures, and contracts, all of which are public and readily accessible. In addition, should any relevant authorities, participants, or participants' Clients have any questions regarding such legal basis, INE may also offer specific legal opinions or analyses.

understandable way.	
Key consideration 4: An FMI should have rules, procedures, and contracts that are enforceable in all relevant jurisdictions. There should be a high degree of certainty that actions taken by the FMI under such rules and procedures will not be voided, reversed, or subject to stays.	INE's rules, procedures, and contracts are formulated in strict accordance with the *Company Law*, the *Securities Law*, the *Contract Law*, the *Customs Law*, the *Regulations on the Administration of Futures Trading*, the *Measures on the Administration of Futures Exchanges*, the *Regulations on Foreign Exchange Control*, the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases*, the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases (II)*, the *Interim Measures for the Administration of Overseas Traders' and Overseas Brokers' Engagement in the Trading of Specified Domestic Futures Products*, the *Announcement No. 40 [2015] of the General Administration of Customs—Announcement on the Bonded Futures Delivery of Crude Oil, the Notice of the State Administration of Foreign Exchange on Issues concerning Foreign Exchange Administration in Overseas Traders' and Overseas Brokers' Trading of Specified Domestic Futures Products*, and other laws, judicial interpretations, administrative regulations, and ministry-level rules; and all its business rules, before their drafting and amendment, have been approved by or revised according to the opinions of CSRC. Therefore, it is assured that INE's rules, procedures, and contracts will not be voided, reversed, or subject to stays and have a high degree of certainty. To date, none of INE's rules, procedures, and actions has ever been held by the court to be unenforceable in People's Republic of China.
Key consideration 5: An FMI conducting business in multiple jurisdictions should identify and mitigate the risks arising from any potential conflict of laws across jurisdictions.	OSBPs and OSNBPs may engage in futures trading on INE. INE has taken the following measures to deal with potential differences between laws of China and overseas jurisdictions: 1. Governing law. According to Article 126 of the *Contract Law* and Article 41 of the *Law on Choice of Law for Foreign-Related Civil Relationships*, the parties to a foreign-related contract may choose governing laws by mutual agreement. The legal relationships between INE and OSPs or the Overseas Intermediaries are governed by Chinese laws as per relevant contracts; and the disputes arising therefrom should also be governed by Chinese laws. Such practice complies with relevant provisions of the *Contract Law* and the *Law on Choice of Law for Foreign-Related Civil Relationships* that the parties to a contract have the right to choose governing laws at their discretion. 2. Overseas registration. INE has completed the automated trading services registration in Hong Kong, and has approved as Recognised Market Operator By Monetary Authority of Singapore, and plans to make further registration in

	other jurisdictions, thus ensuring that the trading conducted by an overseas trader on INE has the legal basis both in their host country and China so as to avoid conflict of laws. 3. Qualification review. Under Article 9 of the *INE Overseas Special Participant Management Rules*, when conducting qualification review, INE will only accept OSBPs from countries which have signed memorandums of understanding with China. Through information exchange and sharing under the memorandums of understanding, INE will be able to know overseas laws and thus avoid conflict of laws between overseas and Chinese laws.

Principle 2: Governance

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Key consideration 1: An FMI should have objectives that place a high priority on the safety and efficiency of the FMI and explicitly support financial stability and other relevant public interest considerations.	With serving the real economy through futures market as its fundamental mission and under the guidance of the *2018-2022 Strategic Plan of the Shanghai Futures Exchange*, INE is committed to building a sound international trading platform for energy derivatives that is internationalized, market-oriented, rule-of-law-based, and professionalized. To that end, INE will (1) follow the diverse product strategy, foster a sound crude oil futures market, list TSR 20 natural rubber, research and develop such futures as liquefied petroleum gas and natural gas, thus forming a tiered and serialized energy futures product offering; (2) align with the market internationalization strategy, explore and improve internationally harmonized rules and systems, discover the possibilities of practical cooperation with the countries along the Belt and Road by focusing on ‘bringing in and going out’ and taking crude oil futures as the breakthrough point; and (3) uphold information integration and technology-driven strategies, so as to provide information, technical support and talent support for the long-term goal of building itself into a world-class exchange. INE submits to the regulation of CSRC. According to its *Articles of Association* and General Exchange Rules, INE is expressly required to guarantee the normal operation of futures trading and the legitimate rights and interests of parties to futures trading as well as the interests of the public at large. In addition, according to relevant provisions of the *Regulations on the Administration of Futures Trading*, INE is a non-profit institution with a goal to protect the public interests.

	INE has established its governance structure in accordance with the *Company Law*, the *Regulations on the Administration of Futures Trading* and *Measures on the Administration of Futures Exchanges*, has in place documented governance arrangements which are available on its official website.
Key consideration 2: An FMI should have documented governance arrangements that provide clear and direct lines of responsibility and accountability. These arrangements should be disclosed to owners, relevant authorities, participants, and, at a more general level, the public.	As a self-regulatory legal person, INE has an established governance structure which comprises the Shareholders' General Meeting, the Board of Directors, and the Supervisory Board. The Shareholders' General Meeting, as the highest authority of INE, consists of all its shareholders. The Board is the standing presence of the Shareholders' General Meeting, while the Supervisory Board serves as the supervisory organ of INE, both of which report to the Shareholders' General Meeting. INE has one President and Chief Executive Officer who is responsible for its day-to-day management. The Exchange is obliged to report to CSRC from time to time, so as to improve its lawful and compliant operation and guarantee futures markets' safety and stability. For example, the Exchange is required to submit to CSRC its annual financial statements within four months following the end of each year, which should be audited by an accounting firm licensed to practice in securities and futures businesses; submit quarterly and annual work reports on the business operations and the implementation of laws, administrative regulations, ministry-level rules, and policies within 15 days following the end of each quarter or 30 days following the end of each year, as appropriate.
Key consideration 3: The roles and responsibilities of an FMI's board of directors (or equivalent) should be clearly specified, and there should be documented procedures for its functioning, including procedures to identify, address, and manage member conflicts of interest. The board should review both its overall	The *INE Articles of Association* clearly specifies the managing powers and duties of the Board of Directors, and the supervisory powers and duties of the Supervisory Board; information on the performance of duties by the Shareholders' General Meeting, the Board, and the Supervisory Board has been systematically documented and retained. As the highest authority of INE, the Shareholders' General Meeting comprises all its shareholders. The Shareholders' General Meeting elects and changes supervisors and directors of INE, deliberates and approves the work reports of the Board, the Supervisory Board, and the President and Chief Executive Officer. The INE Board reports to the Shareholders' General Meeting, decide the appointment of the President and Chief Executive Officer, deliberates financial budget plans proposed by the President and Chief Executive Officer. Pursuant to the *INE Articles of Association*, the Board exercises the following powers and duties: (1) convening shareholders' general meetings and reporting

performance and the performance of its individual board members regularly.	its work to the Shareholders' General Meeting; (2) drafting the Articles of Association and the General Exchange Rules of INE and any amendment thereto and presenting them to the Shareholders' General Meeting for approval; (3) drafting INE's profit distribution plans and loss recovery plans and presenting them to the Shareholders' General Meeting for approval; (4) reviewing the budget plans and final account reports proposed by the President and Chief Executive Officer and presenting them to the Shareholders' General Meeting for approval; (5) reviewing and approving INE's external investment plans; (6) formulating INE's plans on the increase or decrease of registered capital and on the issuance of bonds, and representing them to the Shareholders' General Meeting for approval; (7) reviewing plans pertaining to the INE's merger, division, dissolution and liquidation and presenting them to the Shareholders' General Meeting for approval; (8) supervising the President and Chief Executive Officer's implementation of resolutions of the Shareholders' General Meeting and the Board;(9) deciding INE's internal setup and formation of special committees; (10) deciding on the admittance and exit of INE Members and OSPs; (11) deciding on the disciplinary actions for violations; (12) deciding on the change of the name, domicile, and place of business of INE; (13) reviewing the implementing rules and measures made under the *Articles of Association* and the *General Exchange Rules*; (14) reviewing and approving the application plan for the risk reserve; (15) reviewing and approving INE's development plans and annual work plans proposed by the President and Chief Executive Officer; business rules; (16) organizing the audit of INE's annual financial report and deciding on the engagement and change of accounting firm; (17) reviewing and approving INE's incentive measures, and (18) exercising other powers and duties prescribed by the laws, administrative regulations, ministry-level rules, regulations, the *INE Articles of Association* and delegated by the Shareholders' General Meeting. Pursuant to Article 41 of *INE Articles of Association*, INE has independent directors who are elected at the Shareholders' General Meeting. Under the Board there are Strategic Planning Committee, Remuneration Committee, and other special committees. A special committee assists the Board in performing its work and reports to the Board. In particular, the Board is the standing presence of and report to the Shareholders' General Meeting which deliberates and approves the work reports of the Board. In addition, the Supervisory Board oversees the directors in their performance of duties; proposes the removal of any director who violates any

	law, administrative regulation, ministry-level rule, or the *INE Articles of Association*; and orders a director who acts against the interests of INE to correct his actions.
Key consideration 4: The board should contain suitable members with the appropriate skills and incentives to fulfil its multiple roles. This typically requires the inclusion of non-executive board member(s).	According to the *INE Articles of Association*, the Board consists of five to nine directors, including one Board Chairman and one Board Vice Chairman who are both elected at Board meetings by a majority of all the directors. All members of the Board possess necessary expertise in the futures industry.
Key consideration 5: The roles and responsibilities of management should be clearly specified. An FMI's management should have the appropriate experience, a mix of skills, and the integrity necessary to discharge their responsibilities for the operation and risk management of the FMI.	The *INE Articles of Association* clearly specify the powers and duties of the management team. INE has one President and Chief Executive Officer who is responsible for its day-to-day management and several Executive Vice Presidents and other members of the senior management. The President and Chief Executive Officer exercises the following powers and duties: (1) implementing the rules and resolutions adopted by the Shareholders' General Meeting and the Board; (2) overseeing the day-to-day affairs of INE; (3) formulating related implementing rules and measures in accordance with *Articles of Association* and the General Exchange Rules of the Exchange; (4) formulating the application plan for the risk reserve; (5) drafting development plans and annual work plans of INE and implementing them upon approval; (6) formulating external investment plans of INE and implementing them upon approval; (7) preparing the budget plans and final account reports of INE; (8) developing the merger, division, dissolution, and liquidation plans of INE; (9) preparing the plans for the change of name, domicile, or place of business of INE; (10) deciding on the implementation of forced position reduction; (11) deciding the internal setup plans and the hiring and dismissal of staff members; (12) determining employee salary, rewards, and penalties; and (13) exercising such other powers and duties as delegated by administrative regulations, ministry-level rules, the *INE Articles of Association* or the Board. If the President and Chief Executive Officer is temporarily unable to perform his duties, an Executive Vice President designated by him should do so on his

	behalf. The Shareholders' General Meeting deliberates and approves the work reports of the Board and the President and Chief Executive Officer, as well as financial budget plans and final account reports of INE. The Board has the power to deliberate the financial budget plans and final account reports proposed by the President and Chief Executive Officer and present them to the Shareholders' General Meeting for approval; to review and approve INE's development plan and annual work plan proposed by the President and Chief Executive Officer; to supervise the President and Chief Executive Officer in implementing the resolutions of the Shareholders' General Meeting and the Board; and to monitor INE senior management's and other staff members' state of compliance with applicable national laws, administrative regulations, ministry-level rules, policies, the *Articles of Association* and business rules of INE. Moreover, the Supervisory Board may supervise the conducts of the senior management in their performance of duties, proposes the removal of any member of the senior management who violates any law, administrative regulation, and *INE Articles of Association*, and order a member of the senior management who acts against the interests of INE to correct his actions. The foregoing external and internal supervision and assessment measures work effectively to ensure that the management has the motive and capacity to achieve the objectives of INE.
Key consideration 6: The board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies. Governance arrangements should	INE has an established internal risk prevention and control system including the Chairman, the President and Chief Executive Officer, the Chairman of Supervisory Board, and the senior management, as well as specific implementation requirements thereof, with the risk management and internal control requirements and rules for responsibilities, accountabilities and decision-making clearly defined. The Risk Management Committee of the Shanghai Futures Exchange, the parent company of INE, conducts uniform and collectivized management over INE, which participates in the decision-making related to risk control and management and comprises member representatives, industry professionals and INE staff members. The Risk Management Committee is a deliberative organ under the Board and assists the Board in performing relevant works and reports to the Board of Governors. The main duties of the Risk Management Committee include: (1) providing professional guidance and experience input for the

ensure that the risk-management and internal control functions have sufficient authority, independence, resources, and access to the board.	building of INE's risk management system; (2) making suggestions and advising on INE's efforts to improve its business rules and risk management rules; (3) pre-researching, predicting, and making suggestions and advising on the major risks that have a material impact on normal operation of the market; and (4) providing risk assessment and resolution advices on the major practices and significant business innovation. The members of the Risk Management Committee are allowed to independently express their opinions at a risk-control meeting. In the case of a major issue requiring deliberation, the Risk Management Committee will hold a meeting. The Committee may directly report to and make proposals to the Board to ensure that it makes decisions on business risk management under the authorization of the Board. Meanwhile, INE has dedicated internal risk management department which conducts relevant risk management, research, and other related works as required by the Risk Management Committee to maintain the secure and stable operation of INE's businesses. To prevent financial market risks, INE released the *INE Risk Management Rules*, which cover a comprehensive, multi-dimensional risk management system comprising margin requirement, price limit, position limit, trading limit, large trader position reporting, forced position liquidation, and risk warning.
Key consideration 7: The board should ensure that the FMI's design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders. Major decisions should be clearly disclosed to relevant stakeholders and, where there is a broad market impact, the public.	INE's shareholders may get involved in decision-making through the Shareholders' General Meeting or the Board. For example, the Board has the power to deliberate and approve the INE's development plans and annual work plans proposed by the President and Chief Executive Officer, as well as the implementing rules and measures formulated under the General Exchange Rules of the Exchange. The Shareholders' General Meeting has the power to deliberate and adopt the *Articles of Association* and the General Exchange Rules of the Exchange, and their draft amendments, and deliberate and approve the financial budget plans and final account reports of the INE. INE also solicits on an annual basis the comments from its shareholders through surveys and interviews, questionnaires, members' meeting, and other methods.

Principle 3: Framework for the comprehensive management of risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit,

liquidity, operational, and other risks.	
Key consideration 1: An FMI should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range of risks that arise in or are borne by the FMI. Risk-management frameworks should be subject to periodic review.	**I. Comprehensive risk-management framework** When providing clearing services as a CCP, INE shoulders a wide range of internal or external risks that may arise from the Exchange per se, its participants, Clients, or other entities. These risks include but are not limited to legal risk (see Principle 1), credit risk (Principle 4), liquidity risk (Principle 7), physical delivery risk (Principle 10), general business risk (Principle 15), investment and custody risk (Principle 16), operational risk (Principle 17), and violation risk (see Principle 19). The Board reviews periodically INE's risk-management policies and framework. Special committees under the Board, such as the Strategic Planning Committee, the Remuneration Committee, as well as the Risk Management Committee of INE's parent company – Shanghai Futures Exchange, assist the Board in performing its tasks. In particular, the Risk Management Committee participates in making decisions on INE's risk control and management programs and reports to the Board of Directors (see Principle 2 on governance). To facilitate its routine risk-management efforts, INE has set up the Risk Management Department and the Risk Management Working Group that are responsible for: (1) inspecting, assessing, handling, recording, and reporting risks; (2) making risk-control decisions; (3) preparing risk-management daily bulletin and checking risk-management list; (4) preparing risk management reports; (5) creating a list of material risks; and (6) developing emergency management policies to coordinate responses to various emergencies, improve risk reporting procedures, and consolidate emergency management resources. INE's functional departments, including the Trading Department, Clearing Department, the Legal Affairs Department, the Market Compliance Department, and the Commodity Futures Departments, as well various business systems are committed to jointly and closely monitoring changes in risk intensity and market environment and, in response thereto and according to policy-making rules, updating relevant adjust policies and procedures. INE manages various risks it in day-to-day operations with the supporting rules built on the *INE General Exchange Rules*, such as the *INE Trading Rules*, the *INE Clearing Rules*, *INE Membership Management Rules*, the *INE Risk Management Rules*, the *INE Enforcement Rules*, the *INE Designated Depository Banks Management Rules*, and the *INE Delivery Rules*. Risk management measures and processing procedures are disclosed to the market in written forms

	of rules and detailed rules. For legal risks (see Principle 1), INE has put in place a legal framework consisting of laws, judicial interpretations, administrative regulations, and INE's business rules, laying a solid foundation for offering services as a CCP. In addition, the to-be-enacted *Futures Law* will also provide a more defined legal basis for engaging in futures trading on the Exchange. For credit risks (see Principle 4), INE identifies and measures Members' sources of credit risks and the size of risk exposures by conducting intraday and post-trading stress tests through its risk assessment system; mitigates and eliminates the credit risks facing it through daily mark-to-market clearing and margin call; directs the financial resources that can cover current and potential future exposures caused by each participant with a confidence level of 99% or higher to credit risks; establishes a default waterfall for the tail credit risks uncovered by margin and collateral; and ensures high availability and stability of the risk reserve through separate accounting. For liquidity risks (see Principle 7), INE has created a sound management framework by developing rules, executing agreements, building monitoring systems, conducting stress tests, establishing a risk waterfall model, and performing due diligence to manage the liquidity risks from Members, Designated Depository Banks, and liquidity providers. Specifically, INE takes ex-ante risk management measures to prevent Members' liquidity risks; establishes rigorous admission criteria and performs annual inspections and random inspections to manage the liquidity risks from Designated Depository Banks. In addition, INE has built the technical systems that can continuously identify, measure, and monitor funds settlement and flows; has maintained sufficient liquid financial resources including lines of credit from commercial banks; and conducted stress tests to assess the liquidity risk exposures of all Members and Clients in extreme but plausible conditions. For physical delivery risks (see Principle 10), the delivery risks that have been identified by INE mainly include the custody risks from the warehouses under whose custody standard warrants are put and the delivery default risks of buyers and sellers during the course of physical deliveries. INE imposes stringent requirements on Designated Delivery Storage Facilities. For instance, the obligations and responsibilities of buyers, sellers, INE, and Designated Delivery Storage Facilities as well as the definition of delivery default and the methods for compensation upon default are set out in the *INE Delivery Rules*.

	For general business risks (see Principle 15), INE is a company limited by shares of perpetual existence and sets strict requirements on capital investment and management. For this reason, INE has set up the Financial Committee that provides professional suggestions on financial management and the Financial Audit Committee to review material expenditures out of each department's financial budget; identifies and monitors general business risks on an ongoing basis through bookkeeping system and financial analyses. INE has maintained sufficient net assets funded by equity of high liquidity that can cover the operational costs for minimum six months. Upon the resolution by the Shareholders' General Meeting, INE may increase its registered capital by offering shares, issuing bonus to existing shareholders, converting capital reserve into capital stock, and any other methods prescribed by laws and administrative regulations as well as approved by the CSRC. For custody and investment risks (see Principle 16), INE manages depository banks in accordance with the *INE Designated Depository Banks Management Rules*, which provides defined and stringent requirements for the qualification and management of such banks. Among existing Designated Depository Banks, 12 are reputable national commercial banks, and margin is operated within a 'closed loop' supervised by CFMMC. In addition, INE holds proprietary funds in the form of cash and deposit, and currently has made no short-term investments. For operational risks (see Principle 17), INE addresses potential risks by: (1) establishing a network security system and developing information security strategies under internationally accepted quality management systems and standards; (2) enhancing new and senior employees' risk awareness; (3) adopting a two-staff, double-check mechanism; (4) developing assessment indicators; (5) conducting internal inspections and external evaluations; (6) executing agreements with utility providers; (7) building a monitoring system; (8) 24hr facility check and building environment inspection; (9) carrying out emergency drills; and (10) setting up disaster recovery centers. For violation risks (see Principle 19), multi-tiered participant arrangements are applied. INE understands basic information on Clients' accounts and identifies, monitors, and manages the substantial risks arising out of multi-tiered participant arrangements by look-through regulation, trading code, and relevant system designs. In addition, INE has built an internal real-time monitoring system to identify participants' trading violations, investigate violations, and penalize the entities concerned according to the *INE Enforcement Rules* and,

	under serious circumstances, timely report to CSRC for formal filing and investigation. A violation constituting a crime will be transferred to the judicial authority for criminal prosecution. **II. Risk-management policies, procedures, and systems** To ensure timely risk identification and handling, INE has developed the trading system, the clearing management system, the risk assessment system, the monitoring system, the historical data analysis system, the futures funds management system, the delivery system, and the Standard Warrant Management System as well as a statistical information platform. Such systems and platform work together to provide an overview of Members' and Clients' risk exposures and allow INE to timely address the risks uncovered with such rules as daily mark-to-market, margin requirement, price limits, position limit, large trader position reporting, forced position liquidation, and risk warning. In addition, INE adopts such measures as trading code, separate account management, and tiered clearing and risk prevention system to facilitate participants' and their Clients' to better manage and control potential risks. Internally, for its risk-management framework, INE has developed an audit system covering its entire businesses and operations to ensure normal operation of clearing business as a CCP; formed an effective system of checks and balances and supervision by setting up the Discipline Inspection and Supervision Office and the Internal Compliance Department that conduct disciplinary inspections and internal audits respectively and require the department concerned to rectify the issues discovered within a specified time limit; and identifies risks and improves various business procedures by conducting internal audits of major projects. Externally, INE's annual financial statements are subject to risk-oriented periodic audits by an independent auditor.
Key consideration 2: An FMI should provide incentives to participants and, where relevant, their customers to manage and contain the risks they pose to the FMI.	INE implements a trading code system, segregation of funds, and a tiered clearing system under which INE clears trades with Members and Members clear trades with OSPs and Overseas Intermediaries. During clearing of each day, INE provides participants and their Clients with information on laws and regulations, market rules, operating procedures, prices, trading volume, open interest, margin, and position limit. In addition, INE takes measures against incompliant Members according to relevant rules. These participant management mechanism and incentive measures enables INE to effectively urge participants to manage their risks.

Key consideration 3: An FMI should regularly review the material risks it bears from and poses to other entities (such as other FMIs, settlement banks, liquidity providers, and service providers) as a result of interdependencies and develop appropriate risk-management tools to address these risks.	Currently, the entities closely linked to INE include Members, OSPs, Overseas Intermediaries, depository banks, and delivery storage facilities, for whom INE has developed a sound participant risk-management framework as follows: (1) Members, OSPs, and Overseas Intermediaries. INE monitors Members' and Clients' trading behaviors through a real-time monitoring system, and deals with defaulting Members in accordance with the *INE Trading Rules*, the *INE Clearing Rules*, the *INE Risk Management Rules*, the *INE Enforcement Rules*, among others. For a Member whose Clients include OSPs or Overseas Intermediaries, its clearing deposit should be increased accordingly as per Article 25 of the *INE Clearing Rules*. (2) Depository banks. To address liquidity and credit risks from Designated Depository Banks, INE formulates the *Enforcement Rules*, which provides qualification requirements for applicants and a supervision system for the banks admitted. Moreover, INE conducts annual inspections of depository banks covering their qualification status and performance. (3) Delivery Storage Delivery Facilities. The *INE Delivery Rules*, which governs the futures-related businesses of Designated Delivery Storage Facilities, enables INE to handle potential credit and operational risks associated with delivery storage facilities. The Standard Warrant Management System additionally helps ensure the authenticity of instruments.
Key consideration 4: An FMI should identify scenarios that may potentially prevent it from being able to provide its critical operations and services as a going concern and assess the effectiveness of a full range of options for recovery or orderly wind-down. An FMI should prepare appropriate plans for its recovery or orderly wind-down based on the	Pursuant to the *INE Articles of Association*, CSRC may shut down the Exchange at its discretion; INE may, subject to the approval of CSRC, terminate according to resolutions of the Shareholders' General Meeting or for the purposes of combination or division of the Exchange; and a liquidation team would be set up upon termination of the Exchange. Under the centralized and uniform supervision of CSRC, INE has accrued sufficient amount of net assets funded by equity of high liquidity that support and ensure business sustainability, it is thus able to maintain sustainable, robust operations when suffering general business losses. Furthermore, emergency response plans have been created both at the CSRC level and INE level to address multiple risk events including failure to normally, comprehensively, and fully conduct CCP clearing business or to conduct normal operation and management activities. Although business termination is highly unlikely, INE has assessed the effectiveness of a full range of options for recovery or orderly wind-down.

results of that assessment. Where applicable, an FMI should also provide relevant authorities with the information needed for purposes of resolution planning.	In addition, INE has set up the Risk Management Department that assesses its critical services and operations and prepares and implements corresponding plans. In extreme conditions, if INE does not have sufficient resources to provide said critical services and operations, it may, subject to the approval of CSRC, increase registered capital in accordance with relevant provisions.

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.

Key consideration 1: An FMI should establish a robust framework to manage its credit exposures to its participants and the credit risks arising from its payment, clearing, and settlement processes. Credit exposure may arise from current exposures, potential future exposures, or both.	The credit risks facing INE mainly arises from Members' failure to pay off their outstanding debts. To manage participants' credit exposures and the credit risks arising from payment, clearing, and settlement, INE has developed a set of comprehensive, robust risk-managements as follows: (1) a credit risk management framework built on the *INE General Exchange Rules* and comprising, among other specific business rules, the *INE Clearing Rules*, the *INE Delivery Rules*, the *INE Risk Management Rules*, and the *INE Enforcement Rules*; (2) the *INE Membership Management Rules* and the *INE Overseas Special Participant Management Rules*, which sets out stringent membership and OSP admission criteria that Members must meet on an ongoing basis, and requires clearing Members to be well-capitalized and have relevant personnel and technical systems to ensure that they can perform their membership responsibilities (see Principle 18 on access and participation requirements); (3) daily mark-to-market system that orders a Member to deposit a certain amount of margin before opening positions and a daily mark-to-market risk management under which INE monitors, measures, and identifies on a

	quantitative basis, Members' credit exposures in real time through its risk assessment system; (4) implementing margin call, price limits, forced position liquidation, forced position reduction, and other systems at day-end clearing to eliminate Members' current credit risk exposures; (5) setting minimum clearing deposit requirement and establishing strict haircuts management for collaterals to prevent the Members having a margin deficit from trading on the Exchange and to control or mitigate potential future credit risk exposures; (6) a minimum 99% confidence level for the margin used to cover the current exposures, and the sufficiency of the available financial resources that cover current and potential future exposures of each participant; (7) risk reserve which is extracted at a certain ratio from the transaction fees collected from Members and is of high availability and stability as it is calculated separately and deposited into a special account. If a defaulting Member still falls short of funds after INE has taken relevant measures, INE may draw on the risk reserve according to relevant procedures; (8) a default waterfall for the tail credit risks uncovered by margin or collaterals; and; (9) conducting clearing only through the Clearing Department at its own risk. A Designated Depository Bank only holds in custody Members' margin and assumes no clearing functions or risks. The current 13 Designated Depository Banks, which are either large commercial banks or State-owned joint-stock commercial banks approved by INE in 2017, demonstrate greater capacity in risk management. INE reviews its credit risk-management framework before listing a new product, implementing a new mechanism, and revising its rules and conducts at least one comprehensive review each year.
Key consideration 2: An FMI should identify sources of credit risk, routinely measure and monitor credit exposures, and use appropriate risk-	INE identifies the sources of credit risk, both current and future, by monitoring Members' funds account and by calculating margin requirements. For current credit risks, INE may assess Members' credit risk exposures by conducting intraday real-time clearing each day; identifying and measuring credit exposures through its risk control and management system; and calculating Members' margin, gains and losses, and other funds in real time.

management tools to control these risks.	Generally, the personnel at the Clearing Department may warn the Members with greater risks through phone and eliminate such risks through margin call at day-end clearing. When conducting real-time clearing（real-time risk monitoring）, the risk management personnel may measure and detect credit risk exposures by simulating specified scenarios, the parameters of which may either be set according to the then market risk profile (e.g. the risk management personnel may adjust the margin of a contract based in the life cycle stage of the contract); or be preset based on the assessment of future risk profile (e.g. the risk management personnel may preset the margin requirement for various contracts based on arrangements for public holidays or price limit hits). In addition, INE's risk management personnel may determine the frequency of real-time clearing on an 'as needed' basis. When necessary, INE can and should have the right to require a member to provide additional margin according to real-time clearing results. Following day-end clearing, a Member whose clearing deposit falls below the minimum requirement will be deemed as having received a margin call from INE, in which case, the difference between the minimum requirement and the balance of clearing deposit will be the amount to be replenished. After issuing the margin call, INE may deduct the amount from the Member's dedicated fund account through a depository bank. If a deficiency still exists, the Member should bring the balance to the minimum requirement before market open on the following trading day, failing which, where the balance of the clearing deposit is positive larger than zero but less than the minimum requirement, the Member should not open new positions; where the balance of the clearing deposit is less than zero, INE will conduct forced position liquidation in accordance with the *INE Risk Management Rules*. Regarding the management of potential future credit risks: First, INE sets minimum clearing deposit requirements – ¥2,000,000 for FF Members and ¥500,000 for Non-FF Members. Each time a Member undertakes a clearing authorization from an OSP, or undertakes a trading and clearing authorization from an Overseas Intermediary, its minimum clearing deposit should be increased in accordance with the *INE Clearing Rules*. The minimum clearing deposit should be paid in RMB with Members' own funds. In addition to the trading margin requirement, a Member with a margin call needs to satisfy the minimum requirement for clearing deposit.

	Second, INE has established prudent haircuts and management criteria in light of market liquidity and other factors (see Principle 5 on collateral). Third, to prevent the Members having a margin deficit from trading on it, INE collects margin at a sufficiently high ratio and has taken into account the factors including the close-out period. INE has set up as its clearing agency a department that has easy access to data and information to ensure the timeliness of the information. Moreover, INE evaluates the reliability and effectiveness of its assessment system at least annually.
Key consideration 3: A payment system or SSS should cover its current and, where they exist, potential future exposures to each participant fully with a high degree of confidence using collateral and other equivalent financial resources (see Principle 5 on collateral). In the case of a DNS payment system or DNS SSS in which there is no settlement guarantee but where its participants face credit exposures arising from its payment, clearing, and settlement processes, such an FMI should maintain, at a minimum, sufficient resources to cover the exposures of the two participants and their affiliates that	N/A.

would create the largest aggregate credit exposure in the system.	
Key consideration 4: A CCP should cover its current and potential future exposures to each participant fully with a high degree of confidence using margin and other prefunded financial resources (see Principle 5 on collateral and Principle 6 on margin). In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure for the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources	INE uses such financial resources as margin and risk reserve to cover credit risks. In particular, the margin can cover current and potential future exposures of each participant at a confidence level of 99% or higher; INE determines the minimum sufficient amount of risk reserve resources based on its assessment of market size and risk changes. Currently, INE does not deal in products characterized by discrete jump-to-default price changes. Pursuant to the *INE Clearing Rules*, margin is divided into trading margin and clearing deposit. Trading margin is the funds deposited by a Member into the dedicated settlement account of the Exchange to ensure performance; it is the portion of margin being used to maintain existing positions. Clearing deposit is the funds deposited in advance by a Member into the special clearing account of the Exchange which are not being used to maintain existing positions; the minimum amount of clearing deposit is prescribed by the Exchange. Moreover, the risk reserve is extracted from the management expenses at a certain ratio of the transaction fees collected from Members and is of high availability and stability as it is calculated separately and deposited into a special account. Lastly, INE may obtain from banks certain lines of credit to cover credit risk. To maintain sufficient financial resources to cover credit exposures, INE collects adequate margin during day-to-day operations, specifically, the clearing deposit, trading margin, and other funds deposited by Members can cover the systems' current exposures with a minimum 99% confidence level. Furthermore, INE assess the sufficiency of the risk reserve and bank credit loans at least once each year and will, in view of market risk profile, increase the assessment frequency. For the documentation of supporting rationale of the total risk reserve, according to Article 34 of the *Measures on the Administration of Futures Exchanges*, the President and Chief Executive Officer should work out the plan on the use of risk reserve. The application of the risk reserve should be approved by the INE Board, and be reported to the CSRC and implemented in accordance with the prescribed purposes and procedures.

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.	
Key consideration 5: A CCP should determine the amount and regularly test the sufficiency of its total financial resources available in the event of a default or multiple defaults in extreme but plausible market conditions through rigorous stress testing. A CCP should have clear procedures to report the results of its stress tests to appropriate decision makers at the CCP and to use these results to	INE carries out rigorous stress tests and sets specified scenarios to assess the sufficiency of available financial resources under various default conditions. In particular: (1) Before conducting a reverse stress test, INE will evaluate the effectiveness and suitability of the assumptions and parameters of the test. (2) During a reverse stress test, which is conducted through a risk control and management system, INE determines the total amount of financial resources to be provided in specified simulated scenarios as well as under the conditions when price limit on one contract or one or all products is hit on one, two, or three consecutive days that involve one or all members or clients. (3) After completion of a reverse stress test, the personnel at the Clearing Department will analyze the test result, assess the risk exposures on the following one or several days, evaluate the sufficiency of the current total risk reserve, and will, in the event of greater market risks, increase test frequency. Test results will be timely and directly communicated to proper decision-

evaluate the adequacy of and adjust its total financial resources. Stress tests should be performed daily using standard and predetermined parameters and assumptions. On at least a monthly basis, a CCP should perform a comprehensive and thorough analysis of stress testing scenarios, models, and underlying parameters and assumptions used to ensure they are appropriate for determining the CCP's required level of default protection in light of current and evolving market conditions. A CCP should perform this analysis of stress testing more frequently when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by a CCP's participants increases significantly. A full validation of a CCP's risk-management model should be	makers. INE uses backtesting, i.e., by comparing estimations with actual figures, to examine its stress test models, and will increase the assessment frequency as warranted by market risk profile. In addition, INE assesses the sufficiency of the risk reserve, the credit from banks, and other financial resources used to cover credit risk on an annual basis.

performed at least annually.	
Key consideration 6: In conducting stress testing, a CCP should consider the effect of a wide range of relevant stress scenarios in terms of both defaulters' positions and possible price changes in liquidation periods. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions.	When conducting stress tests, INE creates extreme market scenarios and credit risk scenarios to ensure that it has sufficient financial resources to cover a spectrum of forward-looking stress scenarios in extreme market conditions. INE has, in establishing the base margin for each product, considered peak historic price volatilities, price determinants, 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, so as to ensure that the above-mentioned risks are covered at a confidence level of at least 99 percent. Moreover, INE carries out intraday real-time and after-hours reverse stress tests with respect to the sufficiency of Members' margin according to relevant systems set out in the *INE Risk Management Rules*. In intraday real-time stress tests, a system assesses a Member's credit default risks by calculating the Member's margin, gains and losses, and other funds. When conducting the tests, the risk management personnel may measure and detect credit risk exposures by simulating specified scenarios, the parameters of which may either be set according to the market risk profile (e.g. the risk management personnel may adjust the margin of a contract based in the life cycle stage of the contract); or be preset based on the assessment of future risk profile (e.g. the risk management personnel may preset the margin requirement for various contracts based on arrangements for public holidays or price limit hits). This process allows INE to assess a Member's largest potential credit risks in specified simulation scenarios at clearing before market close on a day. The risk management personnel may conduct more calculations on an 'as needed' basis. In addition, for Members who have an alarmingly high funds utilization ratio, INE will more intensively monitor changes in their funds, positions, and relevant contract prices and will give them due risk warnings through phone. In after-hours reverse stress tests, INE applies price limits to all products in accordance with the *Risk Management Rules* to control risks. If a contract hits price limit on a given day, INE will, after trading hours on that day, conduct stress tests based on the future risks of all contracts with that same underlying product. The tests will estimate Members' funding situation in the following two days (i.e., assuming price limit is hit on three consecutive days), with price changes generally derived from the cumulative magnitude of price limits.

	Trading margin requirement for Members will progressively increase as price limit is hit consecutively over a longer period. These tests allow INE to estimate the exposure it will face after the price limit is hit on three consecutive days. Stress test results will be directly reported to the Risk Management Department and the management. INE will not immediately require a member to deposit margin based on the test result, but will warn it about fund shortfall and negative equity.
Key consideration 7: An FMI should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI's process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.	INE has established explicit rules and procedures that address any possible credit losses to effectively allocate potentially uncovered credit risks. The procedures to replenish financial resources during a stress event are set out in the *INE Clearing Rules*. If INE suffers any actual credit loss resulting from any individual or combined default among its Members arising from their performance of any duties to INE, it will fulfil relevant obligations and responsibilities under a contract in the following sequence: (1) drawing on the risk reserve with the approval of the Board of Directors; (2) making use of its own assets; and (3) exercise the right of recourse to the Member through legal proceedings. Moreover, in the event of greater market risks, INE may obtain certain intraday lines of credit from depository banks.

Principle 5: Collateral

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Key consideration 1: An FMI should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risks.	INE accepts the assets with low credit, liquidity, and market risks as margin. Currently, standard warrants and foreign exchange are accepted as margin collaterals. According to relevant rules, Overseas Traders and Overseas Brokers may directly deposit foreign exchange as margin collateral. INE monitors and manages standard warrants through the Standard Warrant Management System that checks the quality and ownership of the warrant and determines whether there is any legal dispute involved. Moreover, INE manages warehouses on a rigorous basis through regular on-site inspections, in order to ensure that the goods stored meet relevant standards and are properly managed. To reduce credit risks, INE daily marks the value of margin collaterals to market. To mitigate concentration risks, INE prescribes that for a Member using margin collaterals other than foreign exchange, the maximum value of such margin collaterals should not exceed four (4) times (the 'allotting multiplier') the total amount of the RMB cash balance as calculated by respective internal ledgers of the Member with the Exchange. INE may, in its sole discretion, determine the 'allotting multiplier' according to the liquidity and risks of the collaterals, or adjust the 'allotting multiplier' for any Member based on the market risks and the credit of the asset owner. At present, US dollar is the only foreign exchange that INE accepts as collateral. To fully cover the risks arising from changes in exchange rates, INE has established prudent haircuts by taking into account China's existing currency exchange policies, historical exchange rate volatilities, and extreme risk scenarios, among others.
Key consideration 2: An FMI should establish prudent valuation practices and develop haircuts that are regularly tested and take into account stressed market conditions.	Detailed provisions on valuations of margin collaterals and prudent criteria for haircut developments are set out in the *INE Clearing Rules*. Specifically, the maximum amount of margin convertible from a standard warrant is 80% of its market value, which is calculated daily by INE based on the settlement price of the nearest delivery month futures contract in that product on a given day. INE currently discounts standard warrants to 80% of their market value. This discount factor (equaling a 20% haircut) covers the

	full range of prices of futures contracts, and substantially covers the price risks of standard warrants. The discount factor may also be adjusted by INE as it deems necessary. INE determines the value of the foreign exchange to be used as margin based on the current-day central parity rate released by the China Foreign Exchange Trade System. During the daily clearing, the Clearing Department updates the benchmark price of and adjusts the discounted values of foreign exchange deposited as margin according to the aforementioned methodology. Currently, INE only accepts USDs as foreign currency collaterals with a haircut of 5%. In addition, INE daily traces and analyzes the central parity rate of RMB against USD, pays close attention to the exchange rate policy of China's central bank, timely assesses market risks, and promptly adjusts and publishes the haircuts for USD margins by duly considering extreme market risk conditions.
Key consideration 3: In order to reduce the need for procyclical adjustments, an FMI should establish stable and conservative haircuts that are calibrated to include periods of stressed market conditions, to the extent practicable and prudent.	INE establishes prudent haircuts to make reasonable allowance for possible risks and may, when necessary, adjust the haircuts.
Key consideration 4: An FMI should avoid concentrated holdings of certain assets where this would significantly impair the ability to liquidate such assets quickly without significant adverse price effects.	INE monitors the concentration of the foreign exchanges and standard warrants as margin collaterals by tracking the structure of margin weekly. So far, no concentrated holdings of collaterals have ever been identified, USD presents little concentrated liquidation risks.

Key consideration 5: An FMI that accepts cross-border collateral should mitigate the risks associated with its use and ensure that the collateral can be used in a timely manner.	According to the *INE Designated Depository Banks Management Rules*, a bank qualified to conduct futures margin depository business for overseas Clients must be a legal person incorporated within China. Under the *Notice on Issues concerning Foreign Exchange Administration in Overseas Traders' and Overseas Brokers' Trading of Specified Domestic Futures Products* released by the State Administration of Foreign Exchange, a depository bank should be able to timely process foreign exchange purchase and settlement business relating to futures trading. Thus, INE has guaranteed ability to timely and effectively complete the transfer, settlement, and sale of foreign exchanges.
Key consideration 6: An FMI should use a collateral management system that is well-designed and operationally flexible.	For the management of standard warrants, INE's Standard Warrant Management System can use the Client code to identify all of the standard warrants associated with a particular Client. During prescribed time windows, members may freely post standard warrants as margin or release them from the pledge. Any margin funds converted from standard warrants are immediately available for use. INE manages foreign exchange funds through futures fund management system. A Member may flexibly deposit and withdraw its foreign exchange at the prescribed time. During clearing on a day, the Clearing Department recalculates the value of a standard warrant and foreign exchanges and determines the amount margin funds thus converted at the maximum Multiplier.

Principle 6: Margin

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

Key consideration 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.	INE implements a margin system that includes trading margin and clearing deposit, among which, trading margin is collected in proportion to the value of futures contract and should be deposited in advance. INE has established its margin requirement commensurate with the risks and particular attributes of each product on its international trading platform and the market it serves that can reasonably cover – at least one price limit hit – the risks associated with existing products in the market. The price data used in the margin system are from INE's trading system. INE routinely manages margin with the *INE Clearing Rules* and the *INE Risk Management Rules*, which are disclosed on its official website and available to all

	market participants. Provisions on the collection of margins are set out in the *INE Clearing Rules*. Margin is divided into clearing deposit and trading margin. Trading margin refers to the funds deposited by a member into INE's dedicated settlement account to ensure performance; it is the portion of margin being used to maintain existing positions. Once a futures trade is executed, INE collects margin from both sides either in proportion to the value of the contract concerned or by other methods as prescribed. Clearing deposit is the funds deposited in advance by a Member into INE's dedicated settlement account, which is not being used to maintain existing positions. INE sets minimum requirements for clearing deposit – ¥2,000,000 for FF Members and ¥500,000 for Non-FF Members. To prevent the risks exposed to a brokerage Member from its clearing for international participants, each time the Member undertakes a clearing authorization from an OSBP or Overseas Intermediary, its minimum clearing deposit should be increased by ¥2,000,000; each time a Member undertakes a clearing authorization from an OSNBP, its minimum clearing deposit should be increased by ¥500,000. Moreover, for the long and short positions in one product held by a Non-FF Member or a Client at one Member, INE may calculate and collect trading margin on a larger-side basis. Detailed explanations of margin and the adjustment of margin are given in the *INE Risk Management Rules*, which provide that INE may adjust margin by how close a contract is to the delivery month; adjust margin through price limits and in the event of consecutive occurrences of one-sided market; and adjust the base trading margin in view of overall market conditions. To manage current credit exposures, INE collects a margin that can cover the exposures at a minimum 99% confidence level; measures and identifies risk exposures during intraday real-time risk monitoring processes; and eliminates risks with such measures as issuance of margin call and forced position liquidation after the day-end clearing. During real-time risk monitoring processes (intraday stress tests), INE may, through its risk control and management system, assess the largest risk exposure by estimating members' margin, gains and losses, and other amounts at a fixed contract value. The frequency of assessments may be increased by the risk management personnel at the Clearing Department on an 'as needed' basis. For the Members who conduct unduly frequent transfer of funds, the risk management personnel will pay special attention to changes in their funds, positions, and contract prices, and fully warn them about associated risks.

After the completion of day-end clearing, a Member whose clearing deposit falls below the minimum requirement will be deemed to have received a margin call from INE and is required to make up the shortfall before market open on the following trading day. If the Member fails to do so, where the clearing deposit is larger than zero but less than the minimum requirement, the Member should not open new positions; where the clearing deposit is less than zero, INE will enforce liquidation according to the *INE Risk Management Rules*. In the latter case, the Member or the OSP should first close out its positions within the time limit prescribed, failing which, forced position liquidation will be conducted by INE. During the liquidation, INE prioritizes general and arbitrage positions over hedging positions. Specifically, INE first selects the contract to be liquidated by descending open interest of each product after market close on the preceding trading day, then successively liquidates corresponding positions of all Clients or OSNBPs under the Member in each product, ranking by descending net position losses as shown in the internal ledger for that Member or for its OSPs. If multiple Members are subject to forced position liquidation, INE will determine the sequence of these Members by descending amount of additional margin required from each.

Regarding the management of potential future credit risks:

First, INE sets minimum requirements for clearing deposit – ¥2,000,000 for FF Members, OSBPs, and Overseas Intermediaries, and ¥500,000 for Non-FF Members and OSNBPs. In addition to INE's trading margin requirement, a Member with a margin call needs to satisfy the minimum requirement for clearing deposit.

Second, INE has developed prudent haircuts and management criteria by taking market liquidity into account (see Principle 5 Collateral).

Third, to prevent the Members having a margin deficit from trading on it, INE collects margin at a sufficiently high ratio and has taken into account the factors including the close-out period.

According to the *Measures for the Supervision and Administration of Futures Firms*, if a Client has insufficient margin due to defaults during futures trading, his carrying futures firm (Member) should eliminate the shortfall with risk reserve or the firm's (Member's) own assets, and may not divert other Clients' margin funds. If a Member fails to fulfill its contractual obligations, INE is entitled to take the following protective measures according to the *Clearing Rules*: (1) draw on the Member's clearing deposit; (2) suspend the Member's opening of new

	positions; (3) conduct forced position liquidation as prescribed until the margin released is sufficient to cover the obligations and responsibilities; (4) use the cash converted from the margin collaterals that the Member deposits to cover the obligations and responsibilities; (5) draw on risk reserve to cover the obligations with the approval of the Board of Directors; (6) use its own assets to cover the obligations; and (7) exercise the right of recourse to the Member through legal proceedings. The responsibilities of each party involved in forced position liquidation are clarified in the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases*. As an international exchange, INE provides services to futures market participants from different time zones. Trade clearing and settlement is conducted by Beijing Time only; however, when adjusting clearing parameters and margin arrangement, INE takes into consideration such factors as public holidays in different time zones.
Key consideration 2: A CCP should have a reliable source of timely price data for its margin system. A CCP should also have procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.	INE calculates margin based on the prices generated from its system to maintain availability and reliability of price data. For listed products, the prices used in INE's margin model are mainly from the transaction data on the contracts executed in the futures market and those on corresponding commodities in the spot market, including relevant macroeconomic data as well as product output and consumption data released by the National Bureau of Statistics, industry associations, and international organizations. INE also refers to the price fluctuation data on relevant products in the international market (the Chicago Mercantile Exchange and the London Metal Exchange for example), when determining margin requirements. For the products to be listed, INE ensures the reliability and timeliness of price data with representative, authoritative historical price data in China's spot market from third parties. Detailed margin calculation methods for newly listed contracts, inactive contracts, and untraded futures contracts are set out in the *INE Clearing Rules*.
Key consideration 3: A CCP should adopt initial margin models and parameters that are risk-based and generate margin requirements	With the margin model it adopts on the market it serves, INE, an international exchange targeting futures market participants, can effectively meet risk-management requirements and ensure smooth operation of the market. Model design: INE collects trading margin in proportion to contract value under the models that

sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default. Initial margin should meet an established single-tailed confidence level of at least 99 percent with respect to the estimated distribution of future exposure. For a CCP that calculates margin at the portfolio level, this requirement applies to each portfolio's distribution of future exposure. For a CCP that calculates margin at more-granular levels, such as at the subportfolio level or by product, the requirement must be met for the corresponding distributions of future exposure. The model should (a) use a conservative estimate of the time horizons for the effective hedging or close out of the particular types of products cleared by the	determine margin levels based on assumptions of market efficiency and historical data relevance as well as product attributes. Basic level margin is set with the popular exponentially weighted moving average (EWMA) model which is based on historical product price data. Specifically, INE estimates the price volatility at a confidence level of no less than 99% with a weighted average method over a certain sampling period, where the weighting decreases exponentially with each previous period. INE also considers calculating basic level margin with various quantitative models, and then selecting a relatively conservative one as the reference basic level margin. In light of product attributes, officers at INE may determine the basic level margin by taking account of other factors. INE requires its margin models with the larger-side margining system to cover the exposures of at least one day with a minimum 99% confidence level, and it applies stringent criteria to the selection of margin models, key parameters, and close-out period; historical data sampling; identification and mitigation of specific wrong-way risks; and limiting of procyclicality. Moreover, the *INE Risk Management Rules* contain detailed provisions on how margin requirement is to be adjusted based on the size of open interest, how close a contract is to the delivery month, and when the price limit is hit. Model assumptions: INE's margin models determine margin levels based on the assumption of market validity and valuable historical data as well as product characteristics. Key parameters and input of model: The margin models for futures contracts, mainly comprising the EWMA model that is based on historical product price data of nearby month contracts and the generalized autoregressive conditional heteroskedasticity (GARCH) model, can cover exposures of at least one day with a minimum 99% confidence level. When estimating margin levels, INE mainly considers the following factors: price changes in active products, and the time length of roll-over period. Moreover, INE evaluates close-out period according to historical close-outs and the price volatility in the futures market based on the volatility in the spot market. Key parameters such as moving window parameters and decay factors are set according to market attributes of various products. Close-out periods: Close-out periods are set out in the *INE General Exchange Rules*, the *INE*

CCP (including in stressed market conditions), (b) have an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products, and (c) to the extent practicable and prudent, limit the need for destabilising, procyclical changes.	*Clearing Rules*, and the *INE Risk Management Rules*. To eliminate the adverse effect that decreased liquidity of futures products may have on close-out periods, INE has set different position limits for various products by how close a contract is to the delivery month. Unless otherwise prescribed by INE, Members are required to complete forced position liquidation within the morning session after market open. If a Member fails to complete the liquidation within the prescribed time limit, INE will enforce the liquidation. A Member required to carry out forced position liquidation due to negative clearing deposit is not permitted to establish new positions before it eliminates the margin shortfall. The liquidation price is formed through market trading. If forced position liquidation is not fully completed within the prescribed time limit due to price limit or other market factors, the remaining positions may be liquidated in the following trading day in accordance with the *INE Risk Management Rules* until all relevant positions are closed out. Historical data sampling period and considerations: For newly listed contracts, INE selects the sampling period based on the price volatility of the underlying physical products by taking into consideration such factors as market size, market attributes, and price transparency. For existing contracts, the sampling period should cover huge price volatilities. Limiting the destabilizing effect of procyclical changes: INE's margin collection scheme prevents the destabilizing effect of procyclical changes to a large extent by: (1) requiring contributions to margin in advance; (2) collecting margin at a fixed percentage; (3) setting high margin levels; and (4) maintaining low adjustment frequency. Identifications and mitigations of specific wrong-way risk: The marketable securities that INE accepts as margin include standard warrants and USD dollars. In particular, INE has set reasonable haircuts for standard warrants, marks their value to market daily, and ensures their authenticity through the Standard Warrant Management System. USDs deposited as margin are converted to RMB margin fund at a central parity rate 95%, which effectively prevents exchange rate risk. As an international reserve currency, USD has inherent low risk, therefore UDS collaterals are subject to lower issuers' credit risks or wrong-way risks.
Key consideration 4: A CCP should mark	INE collects trading margin in proportion to contract value and implements a daily mark-to-market system. Pursuant to the *INE Risk Management Rules*, INE

participant positions to market and collect variation margin at least daily to limit the build-up of current exposures. A CCP should have the authority and operational capacity to make intraday margin calls and payments, both scheduled and unscheduled, to participants.	may adjust margin levels based on the life cycle stage of contracts following listing, and price limit hits. Margin requirements may also be adjusted in the event of one-sided market, public holidays, and other special circumstances as INE deems necessary. During trading on a day, INE calculates a Member's trading margin and clearing deposit based on the settlement price and the margin requirement of the preceding trading day and does not allow a Member whose clearing deposit falls below the minimum requirement to open new positions. At daily clearing, INE settles the gains and losses of all contracts at the settlement price of the day, collects trading margin based on the settlement price and the margin requirement of the day, and increases or reduces Members' clearing deposits accordingly. Where the balance of a Member's clearing deposit falls below the minimum requirement, a margin call will be deemed to have issued to the Member. According to relevant rules, INE has the authority to, without a notice to a Member, deduct any receivables from the Member's dedicated fund account through Designated Depository Banks, and to access the balance and transaction history of the account at any time.
Key consideration 5: In calculating margin requirements, a CCP may allow offsets or reductions in required margin across products that it clears or between products that it and another CCP clear, if the risk of one product is significantly and reliably correlated with the risk of the other product. Where two or more CCPs are authorised to offer cross-margining, they must have appropriate safeguards and harmonised overall risk-	INE's larger-side margining system allows reduced margin requirements during arbitrage trading of the various contracts in the same product. Under this system, INE collects margin based on larger of the margin required for the long positions and for the short positions held by a Client in the same product. Currently, INE does not grant margin discounts across its products, and no offsets or reductions in required margin between products at INE and another CCP are permitted. INE has developed and analyzed its larger-side margining system over many years. The system has been proven its robustness over this period.

management systems.	
Key consideration 6: A CCP should analyse and monitor its model performance and overall margin coverage by conducting rigorous daily backtesting and at least monthly, and more-frequent where appropriate, sensitivity analysis. A CCP should regularly conduct an assessment of the theoretical and empirical properties of its margin model for all products it clears. In conducting sensitivity analysis of the model's coverage, a CCP should take into account a wide range of parameters and assumptions that reflect possible market conditions, including the most-volatile periods that have been experienced by the markets it serves and extreme changes in the correlations between prices.	INE conducts backtesting each month with respect to its margin model and relevant parameters to test the coverage of margin. INE performs adequate sensitivity analysis of the coverage of the margin collected when developing, using, and evaluating its margin model, and analyzes and assesses, on a periodic or *ad hoc* basis, margin losses due to price fluctuations and fund losses at membership and market levels caused by extreme risks. Backtesting results show that INE's margin scheme has achieved its target confidence level. If its model does not perform as well as expected, INE will take countermeasures according to applicable rules, and file them with CSRC. As detailed in the *INE Clearing Rules* and the *INE Risk Management Rules*, INE has specific margin collection and payment schedules and relevant risk management measures for participants located in multiple time zones.
Key consideration 7: A CCP should regularly review and validate its margin system.	INE modifies and adjusts margin requirements according to the *INE Clearing Rules* and the *INE Risk Management Rules*, and files the updated margin requirements with CSRC. Before effecting a modification or adjustment, INE will, within a reasonable time, issue a prior notice to the market through its

	official website and the membership service system. INE's business departments as well as the Risk Management Department, and the Risk Management Committee organize joint conferences to validate the implementation status of its margin system and adjusted margin requirements. Issues involving major policies will be submitted to CSRC after consideration by the management.

Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Key consideration 1: An FMI should have a robust framework to manage its liquidity risks from its participants, settlement banks, nostro agents, custodian banks, liquidity providers, and other entities.	INE has a robust framework for managing liquidity risks from all relevant participants. Participants posing liquidity risks in INE's existing businesses include Members, Overseas Brokers, and Designated Depository Banks. Main potential sources of INE's liquidity risks include: (1) Members' insolvency due to defaults or bankruptcy; (2) insufficient funds at margin depository banks for margin withdrawals; (3) margin depository banks' failure to provide INE with a certain amount of intraday credit as liquidity providers according to relevant agreement; and (4) difficulties in liquidating the margin collaterals of low liquidity. INE identifies, measures, and monitors its asset settlement and fund flow during and after trading hours through its clearing system, risk control and management system, fund management system, trading system, audit system, Standard Warrant Management System, and delivery system on a timely and ongoing basis. The institutional framework and measures with which INE manages liquidity risks mainly include rules and agreements, such as the *Regulations on the Administration of Futures Trading*, the *INE Clearing Rules*, the *INE Designated Depository Banks Management Rules*, the *Margin Management Rules of the Shanghai International Energy Exchange* (the '*INE Margin Management Rules*') as well as the futures margin depositary agreement between it and each Designated Depository Bank.

	To manage the liquidity risks from Members, INE implements ex ante risk controls including: (1) requiring advanced deposit of margin and forbidding investors from trading with a margin deficit; (2) only accepting cash, highly liquid standard warrants, and foreign exchange as margin; and (3) implementing price limits. Such limits are applicable to both Members and Clients with respect to every contract, thereby limiting the potential scale of default of a participant and its affiliates in extreme scenarios. To manage the liquidity risks from Designated Depository Banks, INE has laid down supervisory requirements regarding their credit standing, capital adequacy ratio, accesses to liquid resources, and operational capacity. Moreover, INE has dedicated personnel to monitor their liquidity concentrations during operations. If the fund balance of a bank is or is likely to be insufficient, INE will transfer funds from other banks with sufficient liquidity to help the bank meet payment obligations on time. INE also conducts routine inspections on the liquidity of depository banks each year.
Key consideration 2: An FMI should have effective operational and analytical tools to identify, measure, and monitor its settlement and funding flows on an ongoing and timely basis, including its use of intraday liquidity.	INE identifies, measures, and monitors its asset intraday and after-hours settlement and fund flow through its clearing system, risk control and management system, fund management system, trading system, audit system, Standard Warrant Management System, and delivery system on a timely and ongoing basis. First, the risk control and management system assesses the sufficiency of a Member's margin during clearing on a day by taking account of changes in open interests, adjustments of margin ratio in view of changes in market conditions, as well as the Member's floating gains and losses, funds deposits, amount of margin from pledged warrants, and delivery payment on the day. The system also estimates all Members' and Clients' funding risks following three price limit hits. Second, during daily clearing, the fund management system evaluates a Member's funds available for withdrawal on that day according to factors such as the Member's margin, amount of margin from pledge, gains and losses of the day, and maximum withdrawal percentage, so as to ensure that the Member's clearing deposit does not fall below the minimum requirement after withdrawal of funds. In addition, INE's fund system monitors Designated Depository Banks' concentration of funds in real time. According to the *INE Designated*

	Depository Banks Management Rules, if INE needs additional liquidity during funds settlement, depository banks should provide the funding support upon request of INE to help INE mitigate risks.
Key consideration 3: A payment system or SSS, including one employing a DNS mechanism, should maintain sufficient liquid resources in all relevant currencies to effect same-day settlement, and where appropriate intraday or multiday settlement, of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation in extreme but plausible market conditions.	N/A.
Key consideration 4: A CCP should maintain sufficient liquid resources in all relevant currencies to settle securities-related payments, make required variation margin payments, and meet	INE has maintained sufficient liquid resources. INE's qualifying liquid resources include trading margin covering both RMB and foreign exchange funds, clearing deposit, marketable securities accepted as margin, risk reserve, and its own assets. Funds from foreign exchange market are of super-high liquidity. First, INE adopts ex ante risk controls by: (1) requiring advanced deposit of margin and forbidding investors to trade by credit; (2) only accepting such assets as standard warrants and foreign exchanges of extremely high liquidity as

other payment obligations on time with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions. In addition, a CCP that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should consider maintaining additional liquidity resources sufficient to cover a wider range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would generate the largest aggregate payment obligation to the CCP in extreme but plausible market conditions.	margin; (3) implementing price limits and limitations on total open interests; and (4) such limits and limitations are applicable to both Members and Clients with respect to every contract, thereby limiting the potential scale of default of a participant and its affiliates in extreme scenarios. Second, INE regularly conducts stress tests to estimate the amount of liquid funds and routinely monitors banks' balances. When facing risks, INE uses stress tests to assess liquidity risk exposures in extreme but plausible conditions. Results of stress tests can cover all Members and Clients. Third, according to the *INE Designated Depository Banks Management Rules*, INE requires banks to cooperate with it in meeting liquidity needs and conducts regular tests on depository banks' liquidity. Furthermore, INE may ensure adequate liquid resources through inter-bank fund transfer. As INE conducts settlement in RMB, is only systemically important in People's Republic of China, and is not exposed to more complex risks, its liquid resources are sufficient.

Key consideration 5: For the purpose of meeting its minimum liquid resource requirement, an FMI's qualifying liquid resources in each currency include cash at the central bank of issue and at creditworthy commercial banks, committed lines of credit, committed foreign exchange swaps, and committed repos, as well as highly marketable collateral held in custody and investments that are readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions. If an FMI has access to routine credit at the central bank of issue, the FMI may count such access as part of the minimum requirement to the extent it has collateral that is eligible for pledging to (or for conducting other appropriate forms of transactions with) the relevant central bank. All	INE's qualifying liquid resources include cash, trading margin, clearing deposit, marketable securities accepted as margin, risk reserve, and its own assets. There are no barriers impeding INE's access to these qualifying liquid resources, for the following reasons: First, trading margin must be deposited in RMB and foreign exchange funds in advance at qualified and designated depository banks. Second, collaterals must be provided by a member within the prescribed period to INE via the Standard Warrant Management System, and foreign exchange funds through futures fund management system.; if a Member fails to cover a margin shortfall, it will be subject to suspension of opening new position, forced position liquidation, and subsequent risk resolutions. Third, INE's risk reserve is deposited in cash in advance at systemically important banks. INE also has explicit rules on the use of risk reserve, for instance, the *INE Articles of Association* state that, the risk reserve usage plan proposed by the President and Chief Executive Officer should be subject to the approval of the Board of Directors, and must be in compliance with the pre-established purposes and procedures after CSRC is duly notified. (see the *INE Articles of Association*). INE conducts RMB settlement and adopts ex ante risk controls by requiring advance deposit of margin. Most of the margin funds consist of cash by far. While the People's Bank of China does not extend INE any regular credit loan at present, INE can obtain certain lines of credit from depository banks to ensure its on-time performance of settlement obligations (see the *INE Clearing Rules*).

such resources should be available when needed.	
Key consideration 6: An FMI may supplement its qualifying liquid resources with other forms of liquid resources. If the FMI does so, then these liquid resources should be in the form of assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos on an ad hoc basis following a default, even if this cannot be reliably prearranged or guaranteed in extreme market conditions. Even if an FMI does not have access to routine central bank credit, it should still take account of what collateral is typically accepted by the relevant central bank, as such assets may be more likely to be liquid in stressed circumstances. An FMI should not assume the availability of emergency central bank credit as a part of its liquidity plan.	INE’s supplementary liquid resources are lines of credit from commercial banks. Based on assessments of participants’ credit and liquidity risks, INE has established various risk control systems: margin requirements can cover a price limit hit of at least one day; implementing a daily mark-to-market system; and conducting real-time settlement multiple times a day to keep risks at manageable levels. As INE’s qualifying liquid resources are sufficient to meet the liquidity needs even under extremely stressed conditions, no supplementary liquid resources have been used. INE always prioritizes qualifying liquid resources over supplementary liquid resources if liquidity needs arise.
Key consideration 7: An FMI should obtain a	INE’s liquidity providers include the margin depository banks which have

high degree of confidence, through rigorous due diligence, that each provider of its minimum required qualifying liquid resources, whether a participant of the FMI or an external party, has sufficient information to understand and to manage its associated liquidity risks, and that it has the capacity to perform as required under its commitment. Where relevant to assessing a liquidity provider's performance reliability with respect to a particular currency, a liquidity provider's potential access to credit from the central bank of issue may be taken into account. An FMI should regularly test its procedures for accessing its liquid resources at a liquidity provider.	signed the margin depository agreement with INE. Depository banks are required to take effective measures to mitigate fund liquidity risks under the *INE Clearing Rules*, the *INE Designated Depository Banks Management Rules*, and the *INE Margin Rules* as well as the *Banking Institution Futures Margin Depository Agreement* executed with INE. If INE needs additional liquidity during funds settlement, depository banks should provide the funding support upon request to help INE mitigate risks. While currently INE is not qualified to obtain credit loan from China's central bank, its margin depository banks, including State-owned commercial banks and one foreign bank, do have access to such credit loan. In addition, a futures firm must deposit margin into a dedicated margin funds account. Margin may only be transferred among the following accounts of a futures firm: its dedicated margin funds account, its dedicated fund account opened at where INE is located, and its fund account at INE. These accounts form a 'closed loop' for the futures firm's margin funds; and margin may only move within this closed loop. Margin is measured and supervised by CSRC's regional offices by comparing the total amount of funds in the loop as reported by futures firms, depository banks, and INE, with the equity of each company and Client. Depository banks should not allow any other entity or individual to freeze or transfer any funds in INE's dedicated settlement account and, if any other entity intends to take measures which may affect the margin depository service (freezing the funds in a Member's dedicated fund account for example), promptly notify INE. Furthermore, depository banks should take effective measures to prevent liquidity risk associated with funds as required by INE. INE investigates depository banks' risk-management efforts and financial position through annual inspections and random checks that are aimed at regulating their operations and financial status. Concentration of margin in these banks are monitored by INE's systems on an ongoing basis.
Key consideration 8: An FMI with access to central bank accounts, payment services, or securities services should use these services, where practical, to enhance its	N/A.

management of liquidity risk.	
Key consideration 9: An FMI should determine the amount and regularly test the sufficiency of its liquid resources through rigorous stress testing. An FMI should have clear procedures to report the results of its stress tests to appropriate decision makers at the FMI and to use these results to evaluate the adequacy of and adjust its liquidity risk-management framework. In conducting stress testing, an FMI should consider a wide range of relevant scenarios. Scenarios should include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Scenarios	Settlement on INE are conducted in RMB only. In carrying out stress tests with respect to the existing single currency, INE has considered the attributes of the clearing business, historic market data, and plausible, extreme conditions. Stress tests are conducted to identify INE's liquidity risk caused by Members' liquidity shortfall and the risks arising from insufficient balance in dedicated fund accounts at banks. Possible sources of Members' liquidity risks are dramatic changes in market conditions, and substantial net withdrawal of funds due to increases or reductions of positions, among others. When the market is exposed to major risks – such as during special circumstances including price limit hits of a nearby month contract and other major volatilities on a trading day – the risk management personnel will first conduct intraday or after-hours credit risk stress tests against these risks, and then based on the test results, check whether Members or Designated Depository Banks meet liquidity requirements. INE carries out intraday stress tests to measure risk exposures on a day. When conducting the intraday stress tests, the risk management personnel at INE may measure and detect risk exposures by simulating specified scenarios, the parameters of which may either be set according to the then market risk profile (e.g. the risk management personnel may adjust the margin of a contract based on the then total open interests on and the life cycle stage of the contract); or be preset based on the assessment of future risk profile (e.g. the risk management personnel may preset the margin requirement for various contracts based on arrangements for public holidays or price limit hits). This process allows INE to assess a Member's largest potential risks in specified simulation scenarios at clearing before market close on a day. In addition, for Members who have an alarmingly high funds utilization ratio, INE will more intensively monitor changes in their funds, positions, and relevant contract prices and give them adequate risk warnings. At least five stress tests are conducted each day. Reverse stress tests are generally conducted after market close. To control risks, INE applies price limits to all products in accordance with the *INE Risk Management Rules*. If a contract hits price limit on a given day, INE will, after trading hours on that day, conduct stress tests based on the future risks of all contracts with that same underlying product. The tests will estimate Members' funding situation in the following two days (i.e., assuming price limit is hit on

should also take into account the design and operation of the FMI, include all entities that might pose material liquidity risks to the FMI (such as settlement banks, nostro agents, custodian banks, liquidity providers, and linked FMIs), and where appropriate, cover a multiday period. In all cases, an FMI should document its supporting rationale for, and should have appropriate governance arrangements relating to, the amount and form of total liquid resources it maintains.	three consecutive days), with price changes generally derived from the cumulative magnitude of price limits. Trading margin requirement for Members will progressively increase as price limit is hit consecutively over a longer period. These tests allow INE to estimate the exposure it will face after the price limit is hit on three consecutive days. INE will not immediately require a Member to deposit more trading margin based on the test result, but will warn it about fund shortfall and negative equity. Stress test results will be directly reported to the Risk Management Department and the management. To address liquidity risks from Designated Depository Banks, INE has laid down supervisory requirements regarding their credit standing, capital adequacy ratio, accesses to liquid resources, and operational capacity. INE has also dedicated personnel to monitor their liquidity concentrations during operations. If the fund balance of a bank is or is likely to be insufficient, INE will transfer funds from other banks with sufficient liquidity to help the bank meet payment demands on time. Moreover, INE regularly checks banks' liquidity and conducts inter-bank fund transfer tests. INE has developed its stress test models on the basis that the base margin can cover risks with a minimum 99% confidence level. The suitability and effectiveness of adjustments to base margin are assessed by INE's business departments as well as the Risk Management Department and the Risk Management Committee. INE validates its risk-management models by combining internal tests with full-member tests, and uses backtesting in evaluations to compare estimations with the actual figures. The frequency of evaluation is determined by changes in market risk profiles.
Key consideration 10: An FMI should establish explicit rules and procedures that enable the FMI to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations on time following any	INE has established sound rules and procedures regarding the use of liquid resources. First, the rules, systems and corresponding measures enable it to meet its settlement and payment obligations on time following any individual or combined default among its participants. If one or more Members fail to fulfill their contractual obligations, INE is entitled to take the following protective measures: (1) draw on the Members' clearing deposit; (2) suspend the Members' opening of new positions; (3) conduct forced position liquidation as prescribed until the margin released is

individual or combined default among its participants. These rules and procedures should address unforeseen and potentially uncovered liquidity shortfalls and should aim to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. These rules and procedures should also indicate the FMI's process to replenish any liquidity resources it may employ during a stress event, so that it can continue to operate in a safe and sound manner.	sufficient to cover the relevant obligations and responsibilities; (4) use the cash converted from the assets that the Members deposit as margin to cover the obligation and responsibilities. If the Members still fail to fulfil their obligations, INE will take the following measures in sequence: (1) draw on risk reserve to cover the obligations; (2) use INE's own assets to cover the obligations; and (3) exercise the right of recourse to the Members through legal proceedings. In addition, INE responds to unforeseen risks by obtaining certain lines of credit from depository banks under a futures margin depositary agreement executed with them and reduces liquidity exposures with loans from commercial banks.

Principle 8: Settlement finality

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Key consideration 1: An FMI's rules and procedures should clearly define the point at which settlement is final.	The point at which clearing is final is clearly defined in INE's supporting business rules. INE implements a daily mark-to-market system and timely notifies Members of clearing results after completion of clearing on a day. A Member who disagrees with the clearing data should notify INE in writing no later than 30 minutes prior to the next market open or, under special circumstances, within two hours after the market open. If a Member does not challenge the clearing data within this period, the Member is deemed as having accepted the accuracy of the data. The Member should in turn carry out clearing with its Clients, OSPs, Overseas Intermediaries based on INE's clearing results and timely notify them of its clearing results in the previously agreed manner; an OSBP or Overseas Intermediary should clear for its Clients and timely notify them of its clearing results in the previously agreed manner. Each Client should confirm the clearing result as stipulated in the futures brokerage contract; if

	there is a disagreement, the Client should notify the futures firm in writing within the time limit specified in the futures brokerage contract, in which case, the futures firm should verify the figures within the agreed time limit. No objection raised by a Client within the specified the time limit is deemed as a confirmation of the result. Furthermore, a confirmation of any day's clearing result is deemed as a confirmation of all the positions and trading and clearing results before that day, the consequences of which are to be solely borne by the Client. After the clearing and settlement deadline, payment and transfer instructions will become irrevocable without exception and the deadline will not be subject to any extension (see the *INE Clearing Rules*, the *INE Membership Management Rules*, the *Measures for the Supervision and Administration of Futures Firms,* the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases*, and the *Regulations on the Administration of Futures Trading*). In addition, the *Enterprise Bankruptcy Law*, the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases*, the *Regulations on the Administration of Futures Trading,* the *Measures for the Supervision and Administration of Futures Firms*, and the *Provisions on the Resolution of Securities Firm Risks* provide a legal basis for the finality of settlement (see Principle 1 Legal Basis). Among them, the *Enterprise Bankruptcy Law* provides that an application for the bankruptcy of a financial institution should be filed by the financial regulator under the State Council; bankruptcy application acceptance procedures are set out in Article 10, which provides that the period from the filing of a bankruptcy application to the acceptance of the case should in general be no less than 30 days. The *Measures for the Supervision and Administration of Futures Firm*s requires any futures firm subject to dissolution or bankruptcy to properly handle Clients' margin funds and other assets first. These provisions give reasonable assurance that financial institutions are generally not susceptible to abrupt bankruptcy, which means settlement finality would not be affected if a Member became bankrupt. The above-mentioned information is disclosed to Members and investors in the form of rules and operational guidelines as well as through INE's official website and other channels.
Key consideration 2: An FMI should complete	INE implements a daily mark-to-market system and its business rules can ensure the completion of final settlement before market open on the following

final settlement no later than the end of the value date, and preferably intraday or in real time, to reduce settlement risk. An LVPS or SSS should consider adopting RTGS or multiple-batch processing during the settlement day.	trading day. Day-end settlement is conducted by the Clearing Department after market close at 15:00 each trading day. Funds deposits by Members are completed by the Department before 15:00 if requests are submitted before market close. Funds withdrawal requests submitted before market close are collectively processed after market close and daily settlement on the same day, while funds deposit or withdrawal requests submitted after market close and daily settlement are processed on the following trading day. No applications for withdrawal of assets used as margin from members, OSPs, Overseas Intermediaries are accepted after 14:30. During settlement on a day, the Clearing Department conducts final settlement for all contracts based on the settlement price of the day, settles trading margin, transaction fees, and taxes for all contracts by crediting or debiting receivables and payables thereof, and increases or decreases the member's clearing deposit accordingly. The gains and losses, charges and fees, delivery payments, and other payments should be paid in RMB funds. Following the completion of daily settlement, a Member whose clearing deposit of any internal ledger with INE falls below the minimum requirement will be deemed as having received a margin call from INE, in which case, the difference between the minimum requirement and the balance of clearing deposit will be the amount to be replenished. After issuing the margin call, INE may deduct the amount from the Member's dedicated fund account through depository banks. If a deficiency still exists, the Member should bring the balance to the minimum requirement before market open (21:00 for continuous trading) on the following trading day, failing which, where the balance of the clearing deposit of any internal ledger is larger than zero but less than the minimum requirement, corresponding Member or OSP should not open new positions; where the balance of the clearing deposit of any internal ledger is less than zero, the Member and OSP should close out its positions within the morning session, or INE will enforce liquidation in accordance with the *INE Risk Management Rules*. In addition, the clearing deposit balance in RMB as shown in any internal ledger of the Member should not be lower than the minimum clearing deposit; otherwise, INE may debit corresponding funds in RMB from the Member's dedicated fund account. If a deficiency still exists, the Member should make it up prior to market open of the next trading day. If the Member fails to make it up in time, INE may impose forced foreign exchange conversion by converting the Member's foreign currency funds in its dedicated fund account or in INE's dedicated settlement account into RMB. For timeliness and finality of fund transfers, INE instructs Designated Depository Banks to provide safe, accurate, and timely futures margin deposit

	and transfer services for the Clients concerned, and to adjust business hours in light of changes in INE's trading and settlement time, so as to meet the needs for the futures margin depositor business. For intra-bank fund transfers, a depository bank, upon receipt of INE's fund transfer instruction, is required to transfer funds to the dedicated fund account that INE designates in real time. For inter-bank fund transfers, a depository bank should, upon receipt of INE's fund transfer instruction, ensure that the funds are transferred in the most efficient way and are timely delivered to the bank that INE designates (see Chapter 3 of the *INE Clearing Rules*, the *INE Risk Management Rules*, and the *INE Designated Depository Banks Management Rules*).
Key consideration 3: An FMI should clearly define the point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a participant.	After the point which clearing and settlement results are final, payment and transfer instructions will generally become irrevocable and immune to exceptional circumstances and relevant deadlines will not be afforded any extensions. Moreover, INE implement a daily mark-to-market system to ensure the completion of the final settlement by the end of the proposed value date. A prior, market-wide notice will be issued for adjustments to the settlement schedule due to public holidays. INE has never postponed settlement to the following business day, whether for itself or for any Member. If a Member delays settlement for certain reason, INE will deal with the Member according to the default procedures; if INE delays settlement for its own reason, it will take measures according to the established emergency response plan, and, if necessary, switch to the Zhangjiang Disaster Recovery Center. Following the last trading day for a contract, holders of open positions in the contract are required to perform their obligations by physical deliveries. The above-mentioned information is clearly defined in INE's business rules, operational guidelines, notices, and announcements and disclosed to the public through INE's website.

Principle 9: Money settlements

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

Key consideration 1: An FMI should conduct its money settlements in central bank money,	INE conducts money settlements in central bank money only. INE conducts settlement through its Clearing Department at its own risks, while banks only hold in custody Members' margin and assume no settlement risk. Moreover, INE opens no account at China's central bank, and designates

where practical and available, to avoid credit and liquidity risks.	commercial banks rather than the central bank as depository banks. The existing thirteen Designated Depository Banks – including twelve large State-owned or national joint-stock commercial banks and one foreign bank (China branch)– all make settlement in the money issued by the central bank. INE has opened a dedicated settlement account at each of the thirteen banks. A Member must conduct money settlement between its dedicated fund account opened at these banks and INE's dedicated settlement account. All money settlements are completed through these dedicated accounts by either bank transfer or negotiable instruments. (See the *INE Clearing Rules*).
Key consideration 2: If central bank money is not used, an FMI should conduct its money settlements using a settlement asset with little or no credit or liquidity risk.	First, all contracts listed on INE are settled in either RMB issued by the central bank or highly liquid marketable securities. Second, the depository banks designated by INE, including reputable, financially robust national commercial banks and a foreign bank specializing in trading derivatives, all engage technical professionals with futures knowledge and higher risk prevention awareness and demonstrate superior risk-management capacity. To mitigate risks and ensure the security of settlement funds, INE has designated multiple commercial banks as its fund depository banks, for whom it has developed strict admission criteria and approval procedures. Admission criteria for margin depository banks are set out in the *INE Clearing Rules* and the *INE Designated Depository Banks Management Rules*. Before conducting futures margin depository business, a newly admitted depository bank is required to enter into a Banking Institution Futures Margin Depository Agreement with INE to specify both parties' rights and obligations. Third, Members' margin, deposited in the accounts opened at depository banks in cash form, is of high liquidity and availability.
Key consideration 3: If an FMI settles in commercial bank money, it should monitor, manage, and limit its credit and liquidity risks arising from the commercial settlement banks. In particular, an	Specific business and technical requirements for depository banks are set out in the *INE Designated Depository Banks Management Rules*. In addition, INE has signed a Futures Margin Depository Agreement with each Designated Depository Bank, which stipulates that depository banks are only responsible for the custody of Members' margin funds and do not perform settlement functions. INE takes the following measures to strictly monitor depository banks' concentration of credit and liquidity risks according to the *INE Designated Depository Banks Management Rules*:

FMI should establish and monitor adherence to strict criteria for its settlement banks that take account of, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability. An FMI should also monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks.	First, INE deposits funds at thirteen banks, which include twelve large State-owned or national joint-stock commercial banks and one foreign bank (China branch); Second, a Designated Depository Bank is required to notify the Exchange and the CFMMC of any major business risk or loss that may impair its credit within three business days from the day the risk or loss arises, and to submit written reports on the analysis of the impact of such risk or loss on its futures margin depository business and the resolutions to address such risk or loss. Third, a Designated Depository Bank is required to conduct reconciliation of the dedicated settlement account of the Exchange on a daily basis; Fourth, a depository bank is required to provide the Exchange with real-time feedbacks on the balances and historical transactions of Members' dedicated fund accounts and to take effective measures to prevent fund liquidity risks; Fifth, the Exchange has the right to initiate inter-bank transfers of margin deposits held with Designated Depository Banks at any time to test the security of margin deposits; Sixth, INE may monitor Members' margin funds accounts in real time through the futures fund management system to ensure the security of funds; Seventh, INE designates dedicated persons in charge of reconciling the data submitted by depository banks on a daily basis and monitoring in real time the balance of dedicated settlement accounts in the banks; Eighth, all of INE's designated depository banks, except for one foreign bank (China branch), are listed banks, which are required to disclose their financial status to regulators and the market on a regular basis; and Ninth, INE conducts on-site inspections on Designated Depository Banks each year and supervises the banks' risk management efforts and financial status.
Key consideration 4: If an FMI conducts money settlements on its own books, it should minimise and strictly control its credit and liquidity risks.	INE uses both its and depository banks' bookkeeping systems in money settlements. First, INE controls credit and liquidity risks from its bookkeeping system by identifying, measuring, and monitoring the flow of funds. This is achieved by developing settlement management, funds management, risk assessment, and other technical systems as well as assigning dedicated professionals. Second, to minimizes the risks associated with depository banks' bookkeeping

	systems, the Exchange requires depository banks to: (1) promptly complete account reconciliation as requested by Exchange after completion of clearing on a daily basis; (2) provide the Exchange with real-time response to any inquiry on the balance and historical transactions of the Exchange's dedicated settlement account at any time during business hours; (3) deliver to the Exchange transaction documents such as Clients' debit/credit notes or breakdown of fund transfers of a day; and (4) provide the account statement of the Exchange's dedicated settlement account as required. Margin is measured and supervised by CSRC's regional offices by comparing the total amount of funds in the loop as reported by futures firms, depository banks, and INE, with the equity of Clients (see the *Interim Measures for the Segregated Management of Futures Brokerage Firms' Margin*).
Key consideration 5: An FMI's legal agreements with any settlement banks should state clearly when transfers on the books of individual settlement banks are expected to occur, that transfers are to be final when effected, and that funds received should be transferable as soon as possible, at a minimum by the end of the day and ideally intraday, in order to enable the FMI and its participants to manage credit and liquidity risks.	The funds received by INE and its participants can be transferred in real time between its dedicated settlement account and Members' dedicated fund accounts. To prevent liquidity risks arising from overdue settlements of funds, INE requires depository banks to observe the following rules for funds settlements: (1) adjust their business hours in light of changes in the trading and clearing hours of the Exchange in order to meet the needs for the futures margin depository services; (2) for intra-bank fund transfers, upon receipt of INE's fund transfer instruction, transfer funds to the dedicated fund account that INE designates in real time; (3) for inter-bank fund transfers, upon receipt of INE's fund transfer instruction, ensure that the funds are transferred in the most efficient way and are timely received by the bank that INE designates; (4) reject any request by any other entity or individual to freeze or deduct the funds deposited in the dedicated settlement account of the Exchange. If any other entity or individual intends to freeze the funds deposited in Members' dedicated fund accounts or take other actions that may affect the margin depository business, Designated Depository Banks should promptly notify the Exchange. Transfers are final and irrevocable. (see Principle 8 Settlement Finality and the *INE Designated Depository Banks Management Rules*).

Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Key consideration 1: An FMI's rules should clearly state its	Physical delivery refers to the process that a buyer and a seller settle open positions in a futures contract through transfer of the ownership of the

obligations with respect to the delivery of physical instruments or commodities.	underlying products in accordance with INE's rules and procedures. For physically delivered futures contracts, delivery for all the open positions at expiry shall be conducted according to the standard delivery procedures. Moreover, physical deliveries against any Client's futures contracts should be executed by members of the Exchange and conducted in the name of the member on or through INE. During physical deliveries, INE, after taking into account the buyers' intentions, matches participants for settlement by allocating available standard warrants to buyers on the second delivery day according to the relevant principles specified in the *INE Delivery Rules*. Pursuant to the *INE Delivery Rules*, the Exchange may implement commodity registration management on the delivery commodities. If a futures contract of the listed products is subject to commodity registration management, the commodities used for the physical delivery, which are represented by standard warrants, must be approved for registration by the Exchange. Chapter 8 (Management of Standard Warrants) of the *INE Delivery Rules* provides that a standard warrant should contain the following items: (1) the full name of the owner of the underlying goods; (2) variety, quantity, and quality of the underlying goods; (3) the venue where the underlying goods are stored; (4) the warehousing fees charged; (5) for the already insured underlying goods, the amount of the coverage, date of issuance ,expiration of the policy, and the name of the insurer shall be contained; (6) issuer, place and date of issuance; and (7) other information that should be included in the standard warrant. The obligations and responsibilities of buyers, sellers, the Exchange, and Designated Delivery Storage Facilities are set out in the *INE Delivery Rules*. The Exchange regularly organizes business training programs for Members and investors to ensure that they are familiar with and understand the physical delivery procedures for relevant products. The *INE Delivery Rules* have been disclosed to the public through INE's website.
Key consideration 2: An FMI should identify, monitor, and manage the risks and costs associated with the storage and delivery of physical instruments or	The risks that have been identified by INE mainly include the custody risks from the warehouses under whose custody standard warrants are put and buyers' and sellers' delivery default risks of during the course of physical deliveries. INE addresses custody risk associated with standard warrants by: (1) requiring delivery storage facilities to obtain its approval before they engage in futures delivery-related businesses; (2) executing an agreement with each Designated

commodities.	Delivery Storage Facility and requiring them to pay performance deposit to ensure performance of obligations; (3) designating delivery storage facilities to be in charge of the custody, safety, and confidentiality of underlying commodities; and (4) requiring delivery storage facility internal audit as well as implementing random and annual inspection conducted by the Exchange. To manage buyers' and sellers' delivery default risk during the course of physical delivery, firstly, the load-in and load-out inspection of the quality and quantity of futures commodities should be conducted by the Designated Inspection Agencies in accordance with the inspection standards and methods specified in the Inspection Rules of corresponding futures products; secondly, INE tracks and monitors a seller's deliverable resources and the accounts opened at a buyer's standard warrant management system before the delivery day; thirdly, INE collects delivery margin from both buyers and sellers during deliveries. Moreover, the definition of delivery default and the methods for compensation upon default are set out in the *INE Delivery Rules* (see Principle 13 Participant-default rules and procedures).

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.

Summary narrative	N/A.

Principle 12: Exchange-of-value settlement systems

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

Key consideration 1: An FMI that is an exchange-of-value settlement system should eliminate principal risk by ensuring that the final settlement of one obligation occurs if and only if the final settlement of the linked obligation also occurs,	INE settles on a net basis and prescribes that a physical delivery can only be carried out after the trading of the corresponding futures contract is completed. Principal risk can be effectively managed under current physical delivery method. INE implements margin requirements and a daily mark-to-market system according to the *Regulations on the Administration of Futures Trading*, under which futures exchanges, futures firms, or non-futures firm clearing Members are prohibited to allow Members with insufficient margin to trade futures. The *INE Clearing Rules* provide that after the end of each trading day, the

regardless of whether the FMI settles on a gross or net basis and when finality occurs.	Exchange will settle all the contracts based on the settlement price of the day and increase or deduct Members' clearing deposit accordingly. After settlement, if a Member's clearing deposit is lower than the minimum requirement following settlement, the Member should bring the balance to the minimum requirement before opening of the next trading day; if the balance of clearing deposit is less than zero, the Exchange will conduct forced position liquidation according to relevant rules. Pursuant to the *INE Delivery Rules*, only after paying for the underlying commodities can the buyer obtain a standard warrant which ensures that delivery of warrants only occurs when the corresponding funds are received. The *INE Clearing Rules* set out that the Exchange should secure payment from the buyer (Member) before allowing the Member (seller) to make the physical delivery. INE, as a CCP which acts as the buyer to every seller and the seller to every buyer, calculates the quantity of receivables/payables or standard warrants to be transferred to/from each Member. Moreover, INE's final settlement of linked obligations occurs simultaneously, and does not rely on the delivery-vs-payment (DvP) or payment-vs-payment (PvP) service from other FMIs in physical deliveries.

Principle 13: Participant-default rules and procedures

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Key consideration 1: An FMI should have default rules and procedures that enable the FMI to continue to meet its obligations in the event of a participant default and that address the replenishment of resources following a default.	INE's rules and procedures clearly define cases of default as well as the methods to identify defaults. In addition, INE adopts a tiered risk prevention system, under which the Exchange manages and monitors the risks from Members, Members manage and monitor the risks of their Clearing Delivery Principals; and FF Members, OSBPs, and Overseas Intermediaries manage and monitor the risks from their Clients. The defaults identified by the Exchange include but are not limited to Members' failure to perform or to fully perform their margin obligations to INE and delivery default. In particular, the former refers to the circumstance under which a Member's clearing deposit falls below the minimum requirement after completion of settlement; delivery default includes: (1) a seller's failure to deliver the agreed number of standard warrants within the specified delivery period; (2) a buyer' failure to make the agreed delivery payment within the prescribed delivery period; and (3) other conducts the Exchange deems as

	delivery default. In accordance with the *INE Clearing Rules*, if a Member fails to fulfill its contractual obligations, INE is entitled to take the following protective measures: (1) draw on the Member's clearing deposit; (2) suspend the Member from opening new positions; (3) conduct forced position liquidation as prescribed until the margin released is sufficient to cover the obligations; and (4) use the cash converted from the collaterals that the Member deposits to cover the obligations. If a deficiency still exists, the Exchange may cover the obligations by drawing on the Exchange's risk reserve, and using INE's own assets in sequence. In addition, INE will exercise the right of recourse to the Member through legal proceedings for reimbursement. In the case of a physical delivery default, if only one party defaults, the defaulting party is to pay the non-defaulting party 20% of the contract value in default as liquidated damages. In this case, the Exchange will return the delivery payment or standard warrants to the non-defaulting party and terminate the delivery. If both parties default, the Exchange will terminate the delivery and impose a fine at 5% of the contract value in default on both parties.
Key consideration 2: An FMI should be well prepared to implement its default rules and procedures, including any appropriate discretionary procedures provided for in its rules.	The management's responsibilities for default handling are clearly defined in INE's internal management systems and procedures. Moreover, INE maintains close contact and communications with CSRC and CFMMC. If a Member fails to fulfil its contractual obligations, INE will timely contact CSRC and may use the risk reserve with CSRC's approval. The Exchange reviews on a periodic or *ad hoc* basis its internal management systems and procedures through rule revisions, internal audit, and compliance check. When there is any material change to its business rules, the Exchange will review its relevant internal default handling systems. INE addresses trading, clearing, delivery, and technical risks as well as other emergencies that materially affect or are likely to materially affect market safety and stability by: (1) creating emergency response plans and procedures; and (2) establishing clear prevention, response, and resolution procedures that ensure normal, full, and sufficient operations of various businesses and orderly operational management; (3) setting up an emergency response leadership group and an emergency response working group who are responsible for identifying risks, classifying risk incidents according to severity, and developing differentiated response procedures by incident type and classification; and (4)

	incorporating response results in assessments on responsible personnel and departments.
Key consideration 3: An FMI should publicly disclose key aspects of its default rules and procedures.	INE's default handling procedures, including countermeasures, scope of countermeasures, persons or entities taking countermeasures, and the mechanisms ensuring performance, are clearly defined in its relevant rules and measures and publicly disclosed through its website. INE revises its default handling rules on an *ad ho*c basis in light of changes in its businesses and rules and issues updates on its official website.
Key consideration 4: An FMI should involve its participants and other stakeholders in the testing and review of the FMI's default procedures, including any close-out procedures. Such testing and review should be conducted at least annually or following material changes to the rules and procedures to ensure that they are practical and effective.	Generally, default handling measures, such as drawing on clearing deposits, restricting opening of positions, and forced position liquidation, may be taken by the Exchange according to its rules. As a result, the Exchange conducts unscheduled system tests and emergency drills on these default handling measures on an annual basis to strengthen links with CSRC, CFMMC, Members, and Clients, and reports drill results to the emergency response leadership group and the emergency response working group. When developing or revising default handling rules, INE invites Members and Clients to participate in discussions and consults their opinions to improve the rules.

Principle 14: Segregation and portability

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

Key consideration 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	INE has segregation and transfer arrangements that effectively protect a participant's Clients' positions and related collateral from the default or insolvency of that participant. First, since China's futures firm Members are not allowed to engage in proprietary trading, there is no case of segregation or embezzlement of positions between members and clients. In addition, the *INE Membership Management Rules* and the *INE Clearing Rules* stipulate that the Exchange shall manage the dedicated settlement account deposited by its members via separate accounts.

default or insolvency of that participant. If the CCP additionally offers protection of such customer positions and collateral against the concurrent default of the participant and a fellow customer, the CCP should take steps to ensure that such protection is effective.	This applies to the margin deposited by each Member in INE's dedicated settlement account, as well as the margin of the Clients of FF Members, OSBPs and Overseas Intermediaries. FF Members are prohibited from misappropriating the Client margins. Second, the *Interim Measures for the Segregated Management of Futures Brokerage Firms' Margin* state that if a Client's equity falls below zero, the carrying futures firm should promptly make up the margin shortfall with its own funds and is prohibited from using other Clients' margins. Third, INE implements a trading code system for investors, under which FF Members and investors shall obey the rule of one trader being dispatched with one trading code, rather than trading in omnibus accounts. The trading code system enables INE to respectively record the positions, margin in use, and collateral of each Client. Through the account segregation and transfer arrangements, INE can effectively protect Client positions and collaterals from the default or insolvency of carrying Members. Fourth, in accordance with the *INE Clearing Rules*, if an FF Member cannot continue in the futures brokerage business for any reason or is subject to consolidation, division, business suspension, dissolution, or bankruptcy, the Member may apply to INE for transfer of Clients' positions. INE has established convenient procedures to ensure completion of transfer of positions within one business day. Fifth, China's laws which support INE's segregation and transfer arrangements with respect to the assets of participants' Clients, provide legal certainty for protection and transfer of positions and collaterals of domestic or foreign participants' Clients.
Key consideration 2: A CCP should employ an account structure that enables it readily to identify positions of a participant's customers and to segregate related collateral. A CCP should maintain customer positions and collateral in individual customer	As China's futures markets generally adopt look-through regulation under the trading code system, INE and its Members can accurately and easily identify each Client's assets through its systems. In addition, according to the *Interim Measures for the Segregated Management of Futures Brokerage Firms' Margin*, a futures brokerage firm must deposit its Clients' margin in full at a commercial bank engaged in the futures trading settlement business, which margin should be segregated from its proprietary funds and managed within a network of accounts. Margin is measured by CSRC's regional offices by comparing the total amount of funds in the loop as reported by futures firms, depository banks, and INE, with the equity of each

accounts or in omnibus customer accounts.	company and Client. Under the guidance of CSRC, CFMMC monitors the margins in the futures market on a daily basis, supervises the implementation of CSRC's rules on the safe custody of futures margins, and promptly reports the issues that may endanger futures margins. The trading code system ensures that the information associated with each customer is unique and helps segregate the assets held by the Clients under the same Member. As a Client's positions, trading margin, and collaterals are all recorded under his own code, under no circumstances would the margin funds of other Clients affiliated with the same Member be misappropriated to bail out a fellow Client with insufficient funds. Once a Client has a margin shortfall, the carrying Member will first use its own funds to eliminate the same.
Key consideration 3: A CCP should structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting participant's customers will be transferred to one or more other participants.	INE's transfer arrangements allow the transfer of positions and collateral of a defaulting participant's Clients to one or more other participants. In accordance with the *INE Clearing Rules*, if a Member cannot continue in the futures-related business for any reason, is subject to consolidation, division, or bankruptcy, or changes the clearing authorization, it or any of its Clearing Delivery Principals may apply to the Exchange for position transfer. The transfer will be conducted upon the approval of INE. Under special circumstances, such as when a Member goes bankrupt but has not yet applied for position transfer, the Exchange may, for the purpose to protect Clients' interests, activate the contingency plan to transfer the positions for related Clients. China's laws also ensure that the positions and collateral of the Clients of a defaulting participant can be transferred to one or more other participants. According to applicable laws, a Client's positions and collateral are the Client's instead of his carrying Member's properties. When his carrying Member becomes bankrupt, a Client may dispose of his positions and collateral at his discretion without being affected by the bankruptcy.
Key consideration 4: A CCP should disclose its rules, policies, and procedures relating to the segregation and portability of a participant's customers' positions and related collateral. In particular,	INE's segregation and transfer arrangements are set out in the *INE Trading Rules* and the *INE Clearing Rules* and have been published on its website. In addition, the *Measures for the Supervision and Administration of Futures Firms*, the *Interim Measures for the Administration of Futures Investor Protection Fund*, and the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases* provide the legal basis for the arrangements.

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.	

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.	INE's Finance Department identifies and monitors general business risks on an ongoing basis through the set financial system and day-to-day financial analyses. In terms of management, INE has set up the Financial Audit Committee under the management of the Financial Department to ensure the correctness and effectiveness of its operational strategies. The Committee is comprised of heads and employee representatives of relevant departments and is responsible for reviewing material expenditures out of the financial budgets of various departments. Moreover, INE reviews the potential impacts on cash flow and capital in its commercial risk evaluation and then assesses its overall financial condition by preparing periodic financial reports, implementing an internal review system, and conducting analyses such as stress tests, liquidity analysis, cost-benefit analysis, debt-paying analysis, and budget and final account analysis. In addition, INE has purchased insurances to cover property losses and created a thorough disaster recovery emergency plan to address the risks from power and network providers. In general, INE currently faces few potential business risks as it focuses on

	primary businesses, retains sufficient capital funds, develops a solid market infrastructure, and maintains sound operations.
Key consideration 2: An FMI should hold liquid net assets funded by equity (such as common stock, disclosed reserves, or other retained earnings) so that it can continue operations and services as a going concern if it incurs general business losses. The amount of liquid net assets funded by equity an FMI should hold should be determined by its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.	INE has retained sufficient net liquid assets funded by equity at a faster speed and is able to continue ongoing and sound CCP clearing business once facing common losses. The growth of INE's net liquid assets outpaces the growth of losses arising from potential general business risks; and the high liquidity of the assets enables INE to continue operations and services in the event of common losses. In addition, INE may, in view of operational and development needs, increase its capital by issuing RMB-denominated ordinary shares or other types of shares to its existing shareholders or other legal persons within or outside China.
Key consideration 3: An FMI should maintain a viable recovery or orderly wind-down plan and should hold sufficient liquid net assets funded by equity to implement this plan. At a minimum, an FMI should hold liquid net assets funded by equity equal to at least six	Pursuant to the *INE Articles of Association*, CSRC may shut down the Exchange at its discretion; INE may, subject to the approval of CSRC, terminate according to resolutions of the Shareholders' General Meeting; and a liquidation team would be set up upon termination of INE. To maintain business sustainability, INE has created an emergency response plan and relevant procedures and measures in alignment with CSRC, prepared a viable recovery or orderly wind-down plan, and reserved sufficient, highly liquid net liquid assets funded by equity equal to at least six months of operating expenses to address losses in extreme conditions.

months of current operating expenses. These assets are in addition to resources held to cover participant defaults or other risks covered under the financial resources principles. However, equity held under international risk-based capital standards can be included where relevant and appropriate to avoid duplicate capital requirements.	
Key consideration 4: Assets held to cover general business risk should be of high quality and sufficiently liquid in order to allow the FMI to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions.	INE analyzes critical financial indicators on a month-to-month basis in order to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions. INE's net liquid assets funded by equity, mainly comprised of cash and bank deposits, are placed under the custody of large State-owned commercial banks that are regulated by China's regulators. In adverse market conditions, all of the non-cash assets can be converted into cash with little or no loss of value. Moreover, the Financial Department conducts periodic assessment of these assets against the standards of simple structure, high liquidity, and ease of realization.
Key consideration 5: An FMI should maintain a viable plan for raising additional equity should its equity fall close to or below the amount needed. This plan should be approved by the board of directors and	INE has sufficient liquid resources backed by stock and sets up risk reserve, and in the case of emergencies, can obtain lines of credit from banks to address business risks. INE is a company limited by shares of perpetual existence. In accordance with laws, administrative regulations, ministry-level rules, and the *INE Articles of Association*, INE may, upon the resolutions adopted by the Shareholders' General Meeting, increase its registered capital by offering shares, issuing bonus to existing shareholders, converting capital reserve into capital stock, and any other methods prescribed by laws and administrative regulations

updated regularly.	as well as approved by the CSRC.

Principle 16: Custody and investment risks

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

Key consideration 1: An FMI should hold its own and its participants' assets at supervised and regulated entities that have robust accounting practices, safekeeping procedures, and internal controls that fully protect these assets.	Currently, INE deposits its own and its participants' assets in 13 Designated Depository Banks, which include twelve reputable, systematically important national commercial banks – the Industrial and Commercial Bank of China, the Bank of China, the Agricultural Bank of China, the China Construction Bank, the Bank of Communications, the China Merchants Bank, the Industrial Bank, the China Minsheng Bank, the China Everbright Bank, the China CITIC Bank, the PingAn Bank, and the Shanghai Pudong Development Bank, as well as the newly-admitted DBS Bank, the largest commercial bank in Singapore. All of the Designated Depository Banks are established within China, subject to the regulation of CBIRC, and headquartered in the same time zone. The *INE Designated Depository Banks Management Rules* set out the admission criteria and requirements for Designated Depository Banks covering qualification application, technical requirements, and emergency response, among others; and clearly states that the Exchange may conduct annual or unscheduled inspections on Designated Depository Banks. In addition, margin is measured and monitored by CSRC's regional offices by comparing the total amount of funds in the loop as reported by futures firms, depository banks, and INE, with the equity of each company and Client. (See Chapters 2 and 6 of the *INE Designated Depository Banks Management Rules* and the *Interim Measures for the Segregated Management of Firms' Margin*).
Key consideration 2: An FMI should have prompt access to its assets and the assets provided by participants, when required.	INE is able to protect its assets and the assets provided by participants. First, when opening an account, INE enters into a depository agreement with each depository bank to specify both parties' rights and obligations, which is of legal force and protected by the *Law of the People's Republic of China on Commercial Banks* and other applicable laws and regulations. Second, Designated Depository Banks' duties and obligations are specified in the *INE Designated Depository Banks Management Rules*. Third, INE has developed its rules, procedures, and contracts in accordance with

	the *Contract Law*, the *Regulations on the Administration of Futures Trading*, the *Measures for the Administration of Futures Exchanges*, the *Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Case*, and other relevant laws, judicial interpretations, and administrative regulations that provide it with a reasonable legal basis, in order to protect its interests or ownership rights in the assets under custody.
Key consideration 3: An FMI should evaluate and understand its exposures to its custodian banks, taking into account the full scope of its relationships with each.	To decrease the concentration of margin funds, INE currently designates 13 banks – 12 reputable, large State-owned or national joint-stock commercial banks and one robust foreign bank – as its depository banks. Moreover, INE conducts stress tests to understand the concentration of its own funds and the liquidity risk exposures to the banks; the Clearing Department monitors the balance of each bank through INE's funds system, so as to ensure that each of them has proper balance to address the liquidity that INE requires in day-to-day operations; and INE tests the margin of each depository bank by transferring funds of varying amount on an *ad hoc* basis to check the security of deposits and maintain funds concentration, and when necessary, will properly manage the funds.
Key consideration 4: An FMI's investment strategy should be consistent with its overall risk-management strategy and fully disclosed to its participants, and investments should be secured by, or be claims on, high-quality obligors. These investments should allow for quick liquidation with little, if any, adverse price effect.	Currently, INE maintains its funds in cash or deposit and makes no short-term investments. In addition, all of its material investment decisions are made by the Board or the Members' Assembly and should be reported to CSRC.

Principle 17: Operational risk

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Key consideration 1: An FMI should establish a robust operational risk-management framework with appropriate systems, policies, procedures, and controls to identify, monitor, and manage operational risks.	Plausible sources of INE's operational risks mainly include unstable technical systems, operational errors, under capacity, impacts of major businesses launched, and disruption of utility services. Accordingly, INE has created an operational risk-management framework covering: (1) Organizational structure. INE's Board of Directors considers and periodically assesses its risk-management systems; the Risk Management Committee and the Risk Management Working Group subordinate to the Board conduct relevant programs; and setup internal departments that are mainly responsible for managing operational risks and conducting internal risk assessments, audits, and compliance inspections. (2) Overall institutional design. INE has created a comprehensive risk-management system as well as multi-level organizational, business, and assurance systems to ensure comprehensive management of operational risks. (3) Standard development and strengthened management that ensure high operational stability and reliability of technical systems. INE has formulated the *Cybersecurity Management Rules* and the Information Security Strategies in accordance with the *Cybersecurity Law* to protect cyber security; has applied ISO 27001 – Information Security Management Systems Requirements to operational procedures, which are also subject to periodic review and audit; and accepts regular external audits each year for timely identification and discovery of operational issues. Moreover, INE has adopted ISO 9001, an internationally accepted quality management standard in its IT operations and manages growing capacity needs by conducting annual system capacity assessment under ISO 20000 which regulates IT service management. (4) Management of growing capacity needs of various systems through the standard capacity management process set out in ISO 20000, in line with which, the technical departments quarterly assess the capacity operational indicators and make a capacity plan in advance for the following year. (5) Operational accuracy and operational risk management. INE adopts a two-staff, double-check mechanism to ensure high operational accuracy and incorporates operational accuracy in employee performance evaluation to minimize operational risks. Moreover, INE endeavors to raise the awareness of risk prevention among its employees by regularly organizing operational risk

	education programs for both new and senior employees; raising risk management awareness across different stages of product development, launch, and established operation; and strengthening business and technical personnel's ability to foresee and identify operational risks. (6) Regular internal inspections and external assessments. INE reviews the implementation status of operational risk-management scheme, checks potential risks, and creates a checklist of risks to ensure the implementation of operational risk management concepts and measures. (7) Trading continuity plans. To address emergencies and maintain trading continuity, INE has developed an emergency response plan; created a cybersecurity emergency contingency plan and accompanying operational guidelines; entered into agreements with utility providers; and established same-city and remote-location disaster recovery systems in Shanghai and another city.
Key consideration 2: An FMI's board of directors should clearly define the roles and responsibilities for addressing operational risk and should endorse the FMI's operational risk-management framework. Systems, operational policies, procedures, and controls should be reviewed, audited, and tested periodically and after significant changes.	Pursuant to the *INE Articles of Association*, the *Working Procedures of the Board of Directors*, and the *Working Procedures of Special Committees under the Board of Directors*, the Board of Directors and the operational management are jointly and ultimately accountable for operational risks. Internally, the Risk Management Department organizes business and technical departments to conduct periodic assessment of operational risks, drafts risk response plans, and submits system improvement suggestions and summarized reports, both of which will be subject to the review by the Risk Management Committee; and the operational management adopts and guides business departments' adoption of risk-management concepts and rules in system development, launch, and operation by combing operational risks with INE's businesses. Externally, competent regulators and the National Audit Office periodically inspect INE's operational risk management and provide the relevant audit results. INE places high emphasis on potential operational risks arising from systems' significant changes. According to the *Rules on the Management of Technical Issues of the Shanghai International Energy Exchange*, the Cybersecurity Management Rules, and other normative documents formulated by INE, it should comprehensively and prudently review, audit, and test its systems, operational policies, procedures, and controls when launching a new business or updating a technical system. For upfront design, development, and testing of IT systems, relevant criteria on quality control are also in place.
Key consideration 3: An FMI should have clearly	To maintain high operational stability, reliability, and accuracy, INE only

defined operational reliability objectives and should have policies in place that are designed to achieve those objectives.	expects a maximum of two system faults lasting no more than 40 minutes in total each year. To achieve this end, business and technical departments have developed a series of internal policies and management procedures to ensure high operational reliability; and the Trading Department, the Clearing Department, the Market Compliance Department, and other business departments have incorporated operational accuracy in their duties. Moreover, INE adopts a two-staff, double-check mechanism in its production systems to avoid operational errors; includes operational accuracy in assessment indicators; and ensures that operators' activities are non-arbitrary by improving relevant systems, maintaining a log for each position and a ledger for each business, periodically teasing out and refining operational procedures, and launching education and training programs for both new and senior employees, with the aim of mitigating operational risks.
Key consideration 4: An FMI should ensure that it has scalable capacity adequate to handle increasing stress volumes and to achieve its service-level objectives.	INE manages growing capacity needs in line with the standard capacity management procedures under ISO 20000. Accordingly, the technical department quarterly assesses the capacity operational indicators and reviews the capacity plan it makes for the following year; and various systems draft capacity plans on a quarterly basis and will increase the system capacity in view of their operational status. If the capacity of a system reaches the threshold prescribed, the person-in-charge of the system will timely increase the system capacity based on its analysis of unsatisfactory operational performance.
Key consideration 5: An FMI should have comprehensive physical and information security policies that address all potential vulnerabilities and threats.	INE addresses potential vulnerabilities and threats by: (1) formulating the *Cybersecurity Management Rules* and the Information Security Strategies according to the *Cybersecurity Law* and relevant regulatory requirements to regulate information and data security, backup mechanisms, handling procedures of and responsibilities for security incidents; (2) adopting ISO 27001 – Information Security Management Systems Requirements to manage daily information security, which verified by relevant international accreditation agency; (3) physically segregating its production network from external networks; (4) applying the highest physical assurances to its production environment in all aspects; (5) deploying major systems in more than one centers; (6) assigning primary and supporting duties for a position to two employees; (7) monitoring security threats in real time; (8) setting security requirements on system software; (9) periodically scanning systems to timely discover security vulnerabilities; and (10) establishing complete identity recognition and authority management systems that enable it to manage the

	security of critical data and to timely handle any issue uncovered.
Key consideration 6: An FMI should have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale or major disruption. The plan should incorporate the use of a secondary site and should be designed to ensure that critical information technology (IT) systems can resume operations within two hours following disruptive events. The plan should be designed to enable the FMI to complete settlement by the end of the day of the disruption, even in case of extreme circumstances. The FMI should regularly test these arrangements.	In day-to-day managements, INE monitors the operation of core systems and software throughout a day with real-time and non-real-time monitoring systems, dedicates persons that work on a 24-hour shift, conducts on-site inspections twice a day to screen hazards and to timely discover faults, and coordinate relevant departments and service providers to resolve problems in time. In addition, INE has established a risk emergency response mechanism and the Emergency Response Leadership Group; developed the corresponding emergency response plan and operational guidelines that fully regulate rapid handling of various risk events disruptive to market operation, public health, and network and technical systems to ensure effective operation and timely recovery of business and technical systems; and addresses risks in the case of emergencies by conducting periodic drills, improving handling procedures, and preparing its system and staff members for emergencies. In line with the above-mentioned rules and guidelines, INE has made a continuity plan that requires its trading system to resume operations following major faults within five minutes and other systems within two hours at a secondary site. To this end, INE has upgraded and deployed its systems, allocated sufficient resources therefor, and holds periodic emergency drills according to its emergency response plans.
Key consideration 7: An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations. In addition, an FMI should	Instead of outsourcing its key services, INE establishes corresponding departments to be in charge of day-to-day operations and maintenances in trading, clearing, product development, technical operation and maintenance, and other areas. To prevent disruption of utility services, INE has executed service agreements with utility providers that set out both parties' rights and obligations; for power supply, INE has accesses to uninterrupted power supply in day-to-day operations as a Class-II electricity user and addresses disruptions of power in extreme

identify, monitor, and manage the risks its operations might pose to other FMIs.	conditions by maintaining backup power supply systems; for network services, INE has built a backup network to which its systems will automatically switch when the primary network services are disrupted. Moreover, INE has created a complete assessment plan for those utility providers.

Principle 18: Access and participation requirements

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

Key consideration 1: An FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements.	Principal market participants of INE include, among others, Members, OSPs, Overseas Intermediaries, Clients, and market makers. Currently, INE has developed rules that clearly specify the access criteria and requirements for each type of participants as well as their rights and obligations at INE. First, participation requirements. **Membership requirements.** Currently, INE has FF Members and Non-FF Members. For Non-FF Members, INE clearly specifies their membership requirements including sufficient registered capital, good credit, and sound business records (see the *INE Membership Management Rules*). For FF Members, in furtherance of the futures firm incorporation requirements prescribed by China's regulators, INE also lays down their membership requirements including sufficient registered capital, good credit, sound business records, well-designed structure, and adequate staffing (see the *Regulations on the Administration of Futures Trading*, Chapter 2 of the *Measures for the Supervision and Administration of Futures Firms*, and the *INE Membership Management Rules*). OSPs are classified into Overseas Special Brokerage Participants (the 'OSBPs') and Overseas Special Non-Brokerage Participants (the 'OSNBPs'). In particular, INE has set admission criteria and requirements for OSPs including, but are not limited to, sound rules and sufficient registered capital (see the *INE Overseas Special Participant Management Rules*). INE also imposes continuous operating period, qualifications, and other requirements on an Overseas Intermediary who is permitted to conduct carrying-brokerage business (see the *INE Membership Management Rules* and the *INE Overseas Special Participant Management Rules*). For Clients, when applying to INE for a trading code, each Client is required to meet such criteria as having basic knowledge of futures trading; having passed relevant tests; having records of live or simulated futures trading; having a

	certain amount of available funds; having in place sound trading management rules, and having no material adverse credit record (see the *INE Futures Trading Participant Eligibility Management Rules*). For market makers, INE manages them based on product type and clarifies that an applicant should have, *inter alias*, a certain size of net assets, dedicated market making department and personnel, sound market making plans, as well as a stable and reliable market making technical system (see the *Market-Making Rules of the Shanghai International Energy Exchange* (the '*INE Market-Making Management Rules*')). Second, services available to participants. INE has formulated rules and detailed rules to specify the rights of its Members and OSPs (see the *INE Membership Management Rules*, the *INE Overseas Special Participant Management Rules*, and Chapter 4 of the *INE Market-Making Management Rules*). Participants' best practices, rights, and obligations in routine operations are also stipulated in various market rules. Third, all relevant rules have been released and made public to the market.
Key consideration 2: An FMI's participation requirements should be justified in terms of the safety and efficiency of the FMI and the markets it serves, be tailored to and commensurate with the FMI's specific risks, and be publicly disclosed. Subject to maintaining acceptable risk control standards, an FMI should endeavour to set requirements that have the least-restrictive impact on access that circumstances permit.	INE's participation requirements are justified in terms of the safety and efficiency of the futures market, tailed to and commensurate with the specific risks of the commodity futures market, and publicly disclosed. In terms of safety, the *INE Membership Management Rules*, the *INE Overseas Special Participant Management Rules*, the *INE Futures Trading Participant Eligibility Management Rules*, and the *INE Market-Making Management Rules*, which are consistent with the foregoing regulations and ministry-level rules, define access requirements for a wide range of market participants as well as their rights and obligations, ensure the reasonableness of access requirements, and meet INE's requirements for managing specific risks. In terms of efficiency, the application requirements, materials, and processes are set out in the *INE Membership Management Rules* and the *INE Overseas Special Participant Management Rules* (see the *INE Membership Management Rules*, the *Overseas Special Participant Management Rules*, and the *INE Market-Making Management Rules*); meanwhile, INE has formulated and released the *Operating Guidelines for Futures Trader Eligibility Rules of the Shanghai International Energy Exchange (Trial)* to clarify the materials required for eligibility management, helping Clients' preparation of necessary materials and improving processing efficiency as well.

	Relevant regulations, ministry-level rules, and INE's detailed rules have been published and can be accessed via the INE website.
Key consideration 3: An FMI should monitor compliance with its participation requirements on an ongoing basis and have clearly defined and publicly disclosed procedures for facilitating the suspension and orderly exit of a participant that breaches, or no longer meets, the participation requirements.	Currently, China's financial regulators have established ongoing monitoring mechanisms for members. NE has specified its rights and the measures available for dealing with violations in implementing rules. Relevant rules have been disclosed publicly. First, in the *Measures for the Administration of Risk Supervision Indicators of Futures Firms* released in 2017, CSRC sets standards for various risk indicators including the net asset and required ongoing compliance by futures firms (for example, the net asset should not be lower than ¥30 million and the ratio between the net asset and the risk capital reserve should not be lower than 100%. See Chapters 2 and 4 of the *Measures*). Second, INE explicitly stipulates Members' and OSPs' reporting obligations and their supervision and management: any Member experiencing significant changes in business, management or other aspects should submit a written report to INE within 10 business days (see the *Membership Management Rules*); and any OSP experiencing a major change in operation, management, or other aspects should submit a written report to INE within 20 trading days (see the *INE Overseas Special Participant Management Rules*). Third, INE has the right and obligation to track and examine participants' compliance with relevant participation requirements. Pursuant to the *INE Enforcement Rules*, the Exchange may exercise regulation over its Members and OSPs, including requiring them to provide such reports as annual reports and third-party audit reports; investigating and taking evidences from them; checking their futures business-related bank accounts; and accessing their technical system for trading, clearing, and financial matters. If a Member or an OSP breaches or no longer meets the participation requirements, INE may take corresponding measures as appropriate for the circumstance, including revoking its Membership or OSP status (see Chapters 2 and 3 of the *INE Enforcement Rules*). Fourth, as to the management of market maker status, INE may revoke the status for any single product under such circumstances as failure to perform quoting obligations or revoke the status for all products under such circumstances as serious violations. INE has also made arrangement for voluntary forfeiture of market maker status (see the *INE Market-Making*

	Management Rules).

Principle 19: Tiered participation arrangements

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

Key consideration 1: An FMI should ensure that its rules, procedures, and agreements allow it to gather basic information about indirect participation in order to identify, monitor, and manage any material risks to the FMI arising from such tiered participation arrangements.	INE is a demutualized futures exchange and, under the framework of current laws, regulations, and its rules and supporting detailed rules, adopts multi-tiered participation arrangements. It may collect the basic account information of indirect participants through its look-through supervision and relevant trade coding and system design, hence identifying, monitoring, and managing material risks arising out of the tiered arrangements. **Tiered participation arrangements** In INE's multi-tiered participation arrangements, direct participants are Members, and indirect participants are Clients, OSPs, and Overseas Intermediaries who trade through futures firms. INE clears for its Members and its Members clear for their Clients. INE may access the name, ID card number, bank account number, and other basic information of a Client since the Client needs to open his account with CFMMC and file such information with INE. **Risk identification and management** INE adopts a tiered risk management structure, under which INE manages and monitors Members' risks; Members manage and monitor the risks of their Clearing Delivery principals; and FF Members, OSBPs, and Overseas Intermediaries manage and monitor their Clients' risks. By implementing the trading code system, INE may identify the positions and transaction orders of Clients and Members in its systems, thus understanding the risk exposure of both direct and indirect participants. It may also identify two kinds of risks from the arrangements: the possible default risk arising from Clients of FF Members due to insufficient margins and the risk of trading violations. To effectively prevent and control default risks, INE applies the margin requirement, price limit, position limit, large trader position reporting, forced position liquidation, risk warning, default risk waterfall, among others, in accordance with the *INE Risk Management Rules*. For the risk of trading violation, INE's Market Compliance Department identifies a Member or Client's trading violations through its real-time monitoring system, historical data analysis system, and SMART system (a

	surveillance system). In accordance with relevant provisions of the *INE Enforcement Rules*, INE will issue a risk warning against an incompliant Member or notify relevant Member to issue a risk warning against its Client in the case of a minor violation, or proceed judicial investigation in the case of a serious violation. In addition, INE may assess its Members' risk management level by performing on-site checks and examining such materials relating to Members' and their Clients' futures trading on INE as trading records, clearing materials, financial statements, certificates, and account books.
Key consideration 2: An FMI should identify material dependencies between direct and indirect participants that might affect the FMI.	INE is capable of identifying material dependencies between direct and indirect participants that might affect it. Through the coding system, INE directly knows the positions and margins of its Members and Clients and makes predictions based on large trader position reports. Furthermore, futures firms report Client transactions and clearing data to the CFMMC on a daily basis; the CFMMC in turn monitors the safety of futures margin and alarms regulators and INE in the case of any safety issue. INE may also access data on Client equity from the CFMMC when necessary.
Key consideration 3: An FMI should identify indirect participants responsible for a significant proportion of transactions processed by the FMI and indirect participants whose transaction volumes or values are large relative to the capacity of the direct participants through which they access the FMI in order to manage the risks arising from these transactions.	INE identifies the proportions of transactions that direct participants conducted on behalf of indirect participants in their capacity, direct participants who conducted transactions on behalf of a large number of indirect participants, and indirect participants who account for a significant proportion of transaction values in the system. A futures firm should be established in accordance with the *Regulations on the Administration of Futures Trading* and the *Measures for the Administration of Risk Supervision Indicators of Futures Firms*. The Members' rights and obligations are specified and their brokerage status are managed pursuant to the *INE Membership Management Rules*. Through the clearing system, INE immediately knows the positions and funds of Members and Clients and identifies the ledgers of different types of Members. It manages member default risks according to the *INE Risk Management Rules* and binds member trading activities according to the *INE Enforcement Rules*. INE may also take several supervision and management measures including violation warning and awareness campaigns, interviews, and on-site inspections.
Key consideration 4: An FMI should regularly	INE regularly or randomly reviews risks arising from tiered participation

review risks arising from tiered participation arrangements and should take mitigating action when appropriate.	arrangements and takes actions to mitigate identified risks when appropriate. Currently, the risk most directly pertinent to the arrangements is default by a Client or futures firm due to insufficient margin. When a direct participant, or a Member, exposes to high risks, INE may, in accordance with relevant provisions of the *INE Risk Management Rules*, reduce the risks by taking such measures as raising margins, imposing position limits on relevant products which exceed the applicable size of position limit, or enforcing position liquidation. Direct participants are responsible for managing the risks of indirect participants. INE regularly or randomly updates the tiered risk management structure based on its business needs. For potential or actual violation risks from participants in the tiered participation arrangements, INE may take such measures as warning and formal investigation in accordance with the *INE Enforcement Rules* or refer any violation which constitutes a criminal offence to the judicial authority to ensure the robustness of the arrangements.

Principle 20: FMI links

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

Summary narrative	'Link' under this Principle 20 refers to direct link between financial market infrastructures or their indirect link through intermediary agents, which can help one financial institution or market expand its business to other financial institutions or markets. Though both INE and the Shanghai Futures Exchange, its parent company, serve as CCP, they are independent legal persons, conduct trading of different products, are subject to different systems of rules, provide independent trading and clearing services, and have in place different risk prevention and control systems. Investors should open separate trading accounts respectively at the two exchanges, and may only access services such as trading and clearing from INE it opens account with. No 'link' as defined under this Principle 20 exists between the two exchanges. Thus, this Principle 20 is not applicable.

Principle 21: Efficiency and effectiveness

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

Key consideration 1: An FMI should be designed to meet the needs of its participants and the markets it serves, in	INE regularly listens to the needs and feedback from market participants from multiple channels, analyzes the market opinions and comments, comes up with solutions accordingly, and gives feedbacks to market participants. When the market demand changes, INE will adjust and improve its businesses, rules, and systems timely to adapt to such changes. Before the launch of new systems and

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.	new features, market-wide test will be conducted to reduce operational risk. Market training will be provided regularly for the launch of new businesses and new systems.
Key consideration 2: An FMI should have clearly defined goals and objectives that are measurable and achievable, such as in the areas of minimum service levels, risk-management expectations, and business priorities.	INE has clearly defined short- and long-term objectives for operational effectiveness, and has worked out practical measures to realize them. To build itself into a world-class exchange, INE will strive to enrich its product offerings, build an international market, consolidate market information, and pursue a technology-driven and talent-centric development strategy; and enhance its capacity and competency at supporting China's real economy and boost global influence. INE breaks down its short- and long-term objectives into clearly defined measurable annual goals, and reviews the achievement of such objectives on an annual basis.
Key consideration 3: An FMI should have established mechanisms for the regular review of its efficiency and effectiveness.	The management at INE convenes regular management meetings each year to audit the implementation of its strategic objectives, and adjusts its specific plans when necessary. The management also holds a meeting each year to listen to and review the working reports of and conducts year-end assessment towards various departments and committees.

Principle 22: Communication procedures and standards

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

Key consideration 1: An FMI should use, or at a minimum accommodate, internationally accepted communication procedures and standards.	INE's systems at the communication layer adopt the internationally accepted communication standard TCP-IP, which can effectively and efficiently connect with all the applications using this international standard. At the application layer, INE has adopted the communication protocol Firepower Threat Defense (FTD) which is commonly used in China. Compared with the mainstream FIX protocol overseas, FTD can better adapt to and meet the requirements of existing businesses in China. If INE needs to connect with

	the system that adopts the internationally accepted communication program, it can introduce a protocol conversion module for efficient connection. INE is considering to adopt the internationally accepted protocol for the next generation trading system.

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

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

Key consideration 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.	INE has clear and comprehensive rules and procedures that are fully disclosed to participants, which can be accessed at the website of INE. Any updates of INE's rules will also be made to the public. INE, through its member service system, announces to its Members the operational procedures and expenses, etc. Meanwhile, INE will organize market training to introduce and explain the rules to its Members and investors. The definition and treatment measures of abnormal events are explicitly stipulated in *Measures on the Administration of Futures Exchanges* and the *INE General Exchange Rules* (see *Measures on the Administration of Futures Exchange* and Chapter 8 of the *INE General Exchange Rules*).
Key consideration 2: An FMI should disclose clear descriptions of the system's design and operations, as well as the FMI's and participants' rights and obligations, so that participants can assess the risks they would incur by participating in the FMI.	INE discloses clear description of the design and operation of the systems, and the rights and obligations of market participants. First, INE keeps detailed documentation on system design and operation data. As for the disclosure of systems operation information, INE not only reports to CSRC the operation information of key systems as required, but also releases relevant information of technical system and concerning requirements to market participants. Second, the rights and obligations of participants are clearly defined in the *Measures on the Administration of Futures Exchanges* (see Chapter 4 of *Measures on the Administration of Futures Exchanges*), which enables market participants to fully understand their rights and obligations so as to better assess the risk of participation.
Key consideration 3: An FMI should provide all necessary and	INE provides necessary and proper training for market participants, and formulates procedures to deal with violations of contracts and regulations. To educate investors, INE has carried out various activities on investor

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.	education, including *Shanghai Futures Exchange's Futures Auditorium, Along with the Investors, Shanghai Commodity Futures Monthly Forum*, etc., to serve the Industry. These activities have been well prepared in advance and thus well received among the market. Through investor education, INE helps market participants better understand the rights, obligations, and risks for the participation of futures market. As for dealing of rule violation, if INE finds that some participants are lack of understanding of rules, procedures and risks of the participation, it will explain to them through various ways such as telephone communication, a written letter, face-to-face communication, etc. If INE confirms that the defaults are caused by lack of knowledge, it will first choose to kindly remind the participants. If compliance is still not achieved after the reminding, INE will investigate, identify, and punish the violators of the contracts and regulations according to relevant provisions in the *INE Enforcement Rules*. If the circumstance is serious, a timely report will be made to the CSRC recommending to initiate an investigation accordingly; and if criminal violation is involved, the case will be transferred to the judicial authority for criminal prosecution. As for default handling, INE has established a sound risk waterfall mechanism, and the sanctions against any default has been explicitly stipulated in the *INE Clearing Rules*, the *INE Delivery Rules*, and the *INE Risk Management Rules*. Upon occurrence of any loss, the relevant Member shall pay in advance for the loss of its Clients, and the decision on risk allocation shall be adopted by the Risk Management Committee of INE. As for the arrangement of business continuity, INE has formulated emergency and disaster recovery plans to ensure smooth operation of the market.
Key consideration 4: An FMI should publicly disclose its fees at the level of individual services it offers as well as its policies on any available discounts. The FMI should provide clear descriptions of priced services for	INE publicly disclose information as detailed as the individual service charges and, existing discount policies, etc. on its official website, and once any concerning changes occur, the Exchange will disclose to the market through its member service system.

comparability purposes.	
Key consideration 5: An FMI should complete regularly and disclose publicly responses to the CPSS-IOSCO Disclosure framework for financial market infrastructures. An FMI also should, at a minimum, disclose basic data on transaction volumes and values.	INE regularly discloses market information to the public. Each year, INE will complete an assessment report on the *Principles for Financial Market Infrastructures*, and disclose it publicly through the official website. The disclosure is made in both English and Chinese. As for disclosure of basic data, according to the *Regulations on the Administration of Future Trading*, the *Measures on the Administration of Futures Exchanges*, and the *INE General Exchange Rules*, INE discloses relevant information that covers price information, trading volume, turnover, delivery volume, delivery amount, open interests, trade ranking, standard warrant, stock, etc.,. The disclosure is carried out daily, monthly, quarterly, and annually. The Exchange also makes other disclosures to the market through announcements and circular. In addition, the Exchange discloses to the market the information on contracts, services, news & events, profile of INE, contact information, etc. (See Article 27 of the *Regulations on the Administration of Futures Trading*, Articles 90 and 91 of the *Measures on the Administration of Futures Exchanges*, and Chapter 9 of the *INE General Exchange Rules*).

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.

Summary narrative	N/A.

V. List of Publicly Available Resources

Regulations on the Administration of Futures Trading	http://www.shfe.com.cn/regulation/exchangelaw/21135442.html
Measures on the Administration of Futures Exchanges	http://www.shfe.com.cn/regulation/exchangelaw/211203689.html
Measures for the Supervision and Administration of Futures Firms	http://www.shfe.com.cn/regulation/exchangelaw/911322933.html
Trial Measures for the Administration of Risk Supervision Indicators of Futures Firms	http://www.shfe.com.cn/regulation/exchangelaw/78172445.html
Guidelines for Launching the Pilot Program for Futures Firms to Establish Subsidiaries Mainly Engaging in Risk Management Services	http://www.cfachina.org/ZCFG/ZLGZ/201412/t20141229_1760445.html
Provisions of the Supreme People's Court on Issues concerning the Trial of Futures Dispute Cases	http://www.shfe.com.cn/regulation/exchangelaw/78177758.html
Interim Measures for the Administration of Futures Investor Protection Fund	http://www.shfe.com.cn/regulation/exchangelaw/78175952.html
Contract Law of the People's Republic of China	http://www.gov.cn/banshi/2005-07/11/content_13695.htm
Enterprise Bankruptcy Law of the People's Republic of China	http://www.gov.cn/flfg/2006-08/28/content_371296.htm
Articles of Association of Shanghai International Energy Exchange Co., Ltd.	http://www.ine.cn/en/regulation/regulation/528.html
General Exchange Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/527.html
Risk Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/521.html
Trading Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/526.html
Clearing Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/525.html

Delivery Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/524.html
Membership Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/520.html
Overseas Special Participant Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/518.html
Futures Trading Participant Eligibility Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/516.html
Designated Depository Banks Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/513.html
Enforcement Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/511.html
Administration of Abnormal Trading Behaviors Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/505.html
Administration of Accounts Involving Actual Control Relationship Rules of Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/508.html
Futures Trading Participant Eligibility Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/516.html
Standard Crude Oil Futures Contract of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/509.html
The Market-Making Management Rules of INE	http://www.ine.cn/en/regulation/regulation/1011.html
Information Management Rules of the Shanghai International Energy Exchange	http://www.ine.cn/en/regulation/regulation/515.html
Glossary of the Rules of the Shanghai International Energy Exchange in Chinese and English	http://www.ine.cn/regulation/regulation/237.html

VI. Disclaimer

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