Containerized Freight Index (Europe service) Futures

Q&A

2023

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International Shipping Market

01 What is international shipping?

International shipping, also known as international maritime transport, is the dominant mode of transport for world trade. Maritime transport is superior to the other modes of transport in carrying capacity and freight rate. According to the *Announcement of China's Maritime Day 2023*, as China is the world's largest trading nation and the second largest economy, international shipping carries about 95% of China's import and export cargo volume.

02 How is the international shipping market segmented?

By the type of cargo transported, the international shipping market can be sub-divided into dry bulk transport, tanker transport, container transport, and special ship transport markets. Dry bulk carriers are used to transport iron ore, grain, coal, cement, and the like. Tankers mainly carry crude oil, refined oil, natural gas, liquid chemicals, and other liquid bulk cargoes. Container ships carry virtually all types of cargo-or "general cargo"-except those mentioned above, but principally industrial, mechanical, and electronic products. Special-purpose ships, including reefer ships and cars, large equipment and lumber carriers, are used to transport goods of irregular shapes or excessive weight or needing special equipment. The dry bulk, tanker, and container shipping markets are the three pillars of the international shipping market.

By the type of transport arrangements, the international shipping market can be classified into tramp shipping market and liner shipping market. Dry bulk transport and tanker transport are generally tramp services; container transport is generally liner services.

03 What are the common types of ships in the international shipping market?

The ships used for international shipping differ from cargo type to cargo type and from route to route. The most common ships in the dry bulk shipping market are the Capesize carriers, Panamax carriers, and Handymax and Handy bulk carriers. For the tanker shipping market, it's ultra large crude carriers (ULCCs), very large crude carriers (VLCCs), Suezmax tankers, Aframax tankers, Panamax tankers, and Handy tankers. In the container shipping market, ships are classified by container capacity. According to Clarksons Research, a breakdown of the carrying capacity of the world's container ships as of the end of 2022 is shown in the table below:

Table 1: Carrying Capacity of the World's Container Ships

Size Range (TEU)	Proportion
17,000 and above	13.95%
12,000 – 16,999	18.60%
8,000 – 11,999	23.64%
3,000 – 7,999	25.58%
Below 2,999	18.22%

04 How big is the international shipping market?

With the booming global trade, especially in OEM and finished products, the international shipping market has grown. According to Clarksons Research, the total volume of global seaborne trade in 2022 recorded at 11.948 billion metric tons, of which 6,219 million metric tons or 52.1% were dry bulk cargoes (including iron ores, coal, grain, and others), 3.923 billion metric tons or 32.8% of tanker cargoes (e.g., crude oil, refined oil products, natural gas, and chemicals), and 1.806 billion metric tons or 15.1% of container cargoes.

05 What are the major trading terms in global shipping market?

FOB, CFR, and CIF are the most common trading terms in global shipping market. Under FOB, the buyer is responsible for chartering the ship, booking space, paying freight at destination, and arranging for and purchasing insurance. With CIF, the seller is responsible for chartering the ship, booking space, prepaying freight, and arranging for and purchasing insurance. With CFR, the seller is responsible for chartering the ship, booking space, and prepaying freight, while the buyer is responsible for the insurance. The shipping term is a reflection of a location's relative strength in trade and transport, and will affect in which country or region the services—such as ship chartering and space booking, freight payment, insurance arrangement and payment—are provided. For example, the dominance of CIF in an export market means that the exporter's location has a bigger say in trade and shipping services.

06 What are the major advantages and features of the world's leading international shipping centers?

Singapore, London, and Shanghai were the top three shipping hubs according to the 2022 Xinhua-Baltic Exchange International Shipping Centre Development Index.

As a world leading free trade port, Singapore implements a free port policy, operating on liberal economic policies in areas of trade, passage, business establishment, finance, and employment and allowing most, if not all, foreign goods to enter and exit the port duty-free. Singapore is also a leader in shipping services, especially in shipping brokerage, ship management, shipping finance, and maritime legal services.

London has a highly developed shipping industry comprising thousands of large service providers that provides all types of modern shipping services—ship registration, ship sale and purchase, shipping transactions, maritime insurance, maritime financial derivatives, maritime legislation, maritime litigation and arbitration, shipping information consultancy, professional training, and industry exchanges, to name a few. London particularly excels in maritime legal services and shipping financial services, being a global leader in both areas.

Thanks to China’s thriving economy and foreign trade, Shanghai has seen rapid development in its modern shipping distribution system and steady improvement in shipping services and business environment. Its international influence will further rise with the greater integration of the Belt and Road Initiative (BRI), the Shanghai Free-Trade Zone, and Shanghai’s international shipping hub initiative and the implementation of the Yangtze River Economic Belt and Yangtze River Delta port integration initiatives. Shanghai has a large shipping market and a wealth of resources. Its shipping center and financial center initiatives are individually empowering and mutually supportive, promising to bring its shipping services to a higher level.

International Container Shipping Market

07 What is international container shipping?

International container shipping is a mode of transport whereby the carrier delivers, through containers, the cargoes consigned by the shipper from one country to another. In international container shipping, liner companies provide non-specific customers with standardized container cargo transport services between fixed ports of call along fixed routes and in accordance with the pre-established sailing schedules and rules. The liners carry all types of products other than dry bulk cargoes, oil products, and special cargoes.

08 What are the supply and demand for international container shipping Market?

According to Clarkson Research, the global container shipping capacity totaled 23.68 million TEU in 2020, 24.75 million TEU in 2021, and 25.63 million TEU in 2022. The international container shipping volume had reached 203 million TEU in 2022, up 205% from 65.62 million TEU in 2000, with a compound annual growth rate of 5.2%.

09 What are the steps in international export container shipping?

Export container shipping generally contains several steps: booking, acceptance of shipping order, dispatch/picking-up of empty containers, container stuffing, haulage of loaded container to port, customs declaration and inspection, loading, departure, and exchange for a bill of lading (B/L).

(1) Booking. The shipper is required to complete a “booking note” some time before the shipment in accordance with the terms of the trade agreement or letter of credit to book capacity through a freight forwarder or with a liner directly.

(2) Acceptance of shipping order. The liner or its agent decides whether to fulfill the shipping order based on its capacity, route, and other factors and the shipper’s needs.

(3) Dispatch/picking-up of empty containers. In FCL shipping, empty containers are usually picked up by the shipper or its agent at the container yard with an equipment interchange receipt (EIR), although some shippers also use their own containers. In LCL shipping, empty containers are picked up by a container freight station with EIR. The shipment needs become reasonably certain once the shipper picks up the empty containers.

(4) Stuffing. Under FCL, the shipper is responsible for loading goods into containers at its warehouse or factory. Under LCL, the shipper or its agent will deliver the goods that will not take up the entire space of a container to the container freight station for consolidation.

(5) Haulage of loaded container to port. The shipper, its agent, or the container freight station delivers the loaded containers to the container yard before its closing.

(6) Customs declaration and inspection. Before

loading and shipment, the shipper or its agent needs to present the dock receipt, export license, and commodity inspection certificate to the customs. The dock receipt will be stamped with the clearance seal once the shipment is cleared.

(7) Loading. The container terminal prepares a stowage plan according to the cargo to be loaded and then moves the containers to the marshaling yard for loading once the ship is berthed.

(8) Departure. The ship is loaded with the cargo and will leave the port by the liner's sailing schedule to the destination port.

(9) Exchange for a bill of lading. The liner will make a B/L for the loaded cargo after the container ship leaves the port for two to three days. The shipper or its agent should exchange its original copy of the dock receipt for the original B/L issued by the liner or its agent, and then complete currency exchange at a bank.

10 What are the different types of containers?

The standard containers commonly used in international shipping are Twenty-feet Equivalent Units (TEU), Forty-feet Equivalent Units (FEU), and Forty-feet High Cube (FHQ). TEU measures 20' (L) × 8' (W) × 8'6" (H), FEU measures 40' (L) × 8' (W) × 8'6" (H), and FHQ measures 40' (L) × 8' (W) × 9'6" (H). Complementing these standard dry goods containers are the various types of special containers such as reefer (e.g., refrigerated), tank, flat rack, and platform.

11 What are full-container load (FCL) and less-than-container load (LCL)?

FCL and LCL are two common modes of container shipping. FCL is the mode where the shipper fills the whole of a container for shipment as a single unit. LCL is the mode where the cargo of one shipper is consolidated with those of others in a single container because it is not enough to fill a whole container by itself.

12 What are the common ways of dropping off and receiving container cargo?

Container Yard (CY), Container Freight Station (CFS) and Door are the three essential concepts in the delivery and receiving of container cargoes. A container yard is a designated storage area for handing over and storing loaded and empty containers. A container freight station, similar to a warehouse, is where cargoes are processed and consolidated into containers. A “door” is the door of the shipper’s factory or warehouse. Accordingly, there are nine combinations for cargo handover: CY/CY (CY to CY), CY/CFS, CY/Door, Door/Door, Door/CY, Door/CFS, CFS/Door, CFS/CY, and CFS/CFS. The specific choice depends on forms of the cargoes of container that are to be dropped off and received. Generally, liners use CY/CY, while NVOCCs that handle LCL shipments often use CFS/CFS.

13 What are the participants of the international container shipping market?

Major participantsinclude owners of means of transport, carriers, intermediaries, and shippers.

Owners of means of transport own container shipping assets and are broadly classified into shipowners and container companies. In particular, shipowners can be liner companies, large financial institutions, and other institutions that own container ships.

Carriers refer to the person by whom or in whose name a contract of carriage of goods by sea has been concluded with a shipper. Carriers mainly consist of liners and non-vessel operating common carriers (NVOCCs).

Most shippers are cargo owners who may be the consignors or the consignees.

Intermediaries provide intermediary services—space booking, customs declaration, and inspection declaration, for example—for carriers and shippers. The most common intermediaries are NVOCCs, common freight forwarders, shipping agents, and customs brokers.

14 What are the differences between a NVOCC and a liner company?

The *Maritime Law of the People's Republic of China* defines a carrier as "the person by whom or in whose name a contract of carriage of goods by sea has been concluded with a shipper." Carriers mainly include liner companies and NVOCCs. A liner offers international shipping services with leased or its own container ships. By contrast, a NVOCC, upon accepting goods from a shipper in the capacity of a carrier, consigns the goods as a shipper to a liner for shipping.

15 What are Base Ports and Non-Base Ports?

The ports in international container shipping are divided into Base Ports and Non-Base Ports. A Base Port is the port which liner companies generally call on with their vessels on a regular basis. Located within regional hubs such as Shanghai and Ningbo Zhoushan in China, most Base Ports are large and well equipped, enabling the shipment of a large and stable volume of cargoes. Generally, cargoes bound to Base Ports are shipped directly. Non-Base Ports are ports other than Base Ports.

16 What are the major ports in the international container shipping market?

The world's top ten container ports in 2022 were Shanghai, Singapore, Ningbo Zhoushan, Shenzhen, Qingdao, Guangzhou, Busan, Tianjin, Hong Kong (China), and Rotterdam, with Chinese ports taking seven of the top ten spots by throughput. The seven ports had a combined throughput of 198 million TEU, accounting for 72.9% of that of the top ten. Notably, the Shanghai Port, with a throughput of 47.3 million TEU, has been the largest container port in the world for 13 years in a row.

17 What is the composition of the international container freight rate?

The freight rate has two major components—basic ocean freight and surcharges—and is commonly quoted and settled in U.S. dollars. Basic ocean freight is charged by liners for each pricing unit (such as 1 FEU or TEU) of cargo shipped under the CY/CY term. Surcharges are the additional fees charged by liners according to the specific terms of carriage, fuel prices, peak or off-peak seasons, industry practices, etc. Examples include bunker fuel surcharge, currency surcharge, peak season surcharge, war risk surcharge, congestion surcharge, canal surcharge, International Security Port Surcharge, and inland transshipment charges. In addition to the regular freight, international container shippers also need to bear a list of expenses quoted in their local currencies, such as terminal handling charges, documentation charges, telex release charges, customs declaration charges, container loading charges, and trucking charges.

18 What are the major factors influencing the international container freight rate?

The major influencing factors of international container freight rate are:

(1) Supply and demand. The supply and demand of the international container shipping market is the determinant of the freight rate. In general, a liner's shipping order ratio for a voyage is a real-time measure of the supply and demand situation for that voyage, while the loading ratio after the voyage starts has a large impact on the liner's pricing strategy.

(2) Costs. The level of costs has a remarkable impact on the freight rate. The main components of container shipping costs are fixed investment in vessels and containers, voyage operation cost, administrative expenses, and financial expenses.

(3) Global economy. The demand for international container shipping arises from global trade. Growth in global container capacity and growth in global trade are closely related. The international container freight rate is also strongly linked to the global economic environment.

(4) Exchange rate. Exchange rate fluctuations can have an impact on the cost control and profit calculation of liner companies, thus affecting their freight rate.

(5) Geopolitics. Past or future policies or major events that had or will have an impact on the global trade can trigger a short-term swing in the freight rate and even affect the long-term price trend.

(6) Other factors. Due to the diversity of goods and a long transport chain, the international container freight rate is impacted by many other factors, such as changes in upstream or downstream industries, weather, port strikes, anti-monopoly amendments, price negotiations for long-term supply agreements, alliance restructuring, and competition.

Domestic and Overseas Shipping Indices and Shipping Derivatives Markets

19 What are the major shipping freight index providers in the world?

Currently, the world's general shipping freight index providers are the Shanghai Shipping Exchange (SSE), Ningbo Shipping Exchange, Baltic Exchange, and S&P Global Platts, whose shipping freight indices cover container, dry bulk, and tanker, shipping.

20 What shipping derivatives are available in overseas markets?

Major overseas exchanges that list and clear shipping derivatives include the Singapore Exchange (SGX), European Energy Exchange (EEX), Chicago Mercantile Exchange (CME), and Intercontinental Exchange (ICE). The contracts range from futures to options and FFAs. In particular, CME and SGX launched their container freight index futures in 2022 and 2023 respectively.

Compilation and Publication of SCFIS (Europe Service)

21 What are the rules governing the compilation of SCFIS (Europe service)?

The rules governing the compilation of Shanghai (export) Containerized Freight Index based on Settled Rates (SCFIS) (Europe service) mainly include the *Rules for Compilation of SCFI based on Settled Rates (Provisional), Measures of Shanghai Shipping Exchange for Amendments to Index Rules, Measures of Shanghai Shipping Exchange for Termination of Indices, and Measures of Shanghai Shipping Exchange for the Correction of Index Errors.*

These rules are available on SSE’s official website.

22 What is the governance system of SCFIS (Europe service)?

SSE develops a comprehensive governance system that is comprised of the Index Expert Committee, Index Compilation Committee, and Internal Oversight Committee to ensure the impartiality and independence of the underlying index.

The Index Expert Committee is composed of experts engaged by SSE and advises on matters relating to the underlying index: (1) the formulation and modification of compilation methods, rules, and detailed implementation rules of the index, and (2) the operation and commercial development of the index.

The index compilation committee is the Europe-US Service Subcommittee under the China (Export) Containerized Freight Index (CCFI) Compilation Committee. Consisting of eligible samplers, the Subcommittee is responsible for deciding on matters relating to the implementation of the compilation rules of SCFIS Europe and US services and reporting the relevant data according to the index compilation plan.

The Internal Oversight Committee, as the internal supervisory body of SSE, oversees matters relating to the compilation and governance of SCFIS.

23 What are the samplers of SCFIS (Europe service)?

The samplers are the panelists of the Europe-US Service Subcommittee under the SSE CCFI Compilation Committee. As of June 2023, the Subcommittee has 16 panelists, of which 15 (including 11 liner companies and 4 freight forwarders) report the settled freight rates of the Europe service to SSE.

The list of the panelists is available on SSE's official website.

24 What is included in freight rate information collected by SSE for the compilation of SCFIS (Europe service)?

SSE has a clear specification on the freight rate information collected from the panelists of the Index Compilation Committee. The specification covers the port of departure, port of destination, cargo type, container type and size, payment method, shipping terms, freight composition, and currency. Specifically, the port of departure is the Port of Shanghai; the port of destination is the base port of the route—Hamburg, Rotterdam, Antwerp, Felixstowe, and Le Havre. The containers are dry cargo containers, including 20-foot General Purpose containers (20GP), 40-foot General Purpose containers (40GP), and 40-foot High Cube containers (40HQ). The cargoes are general cargoes. The payment method is the prepayment of freight. The shipping term is Container Yard to Container Yard (CY/CY). The freight comprises the per-container ocean freight and related surcharges, which include fuel-related surcharge (e.g., BAF/FAF/LSS), currency surcharge (e.g., CAF), peak season surcharge (e.g., PSS), war surcharge (e.g., WRS), port congestion surcharge (e.g., PCS), canal surcharge (e.g., SCS/SCF/PTF/PCC), and other per-container USD ocean freight surcharges.

The spot market for shipping liners is defined as a three-month or less contract market, or a FAK (Freight All Kinds Rates)-based market, or an open market. The spot market for freight forwarders is defined as a market for retail contracts between them and clients, and the transaction price in which is not influenced by such factors as the type of cargo owner or the particulars of container volume.

25 How is SCFIS (Europe service) compiled?

The SCFIS (Europe service) is compiled through the following process:

Step 1: Data collection

According to the SSE specification, sample companies will, during 0:00-13:00 each Monday Beijing time, transmit information from the executed bills of lading (B/L) for voyages with actual departure time (ATD) between 0:00 last Monday and 24:00 last Sunday through the application program interface (API) automation system. Each B/L contains such information as B/L number (unique), destination port, container volume by container type and corresponding freight rate.

Step 2: Data pre-treatment

(1) Verifying the B/L information. SSE uses the manifest data from Shanghai port to verify the information on each reported B/L such as the name of the ship, voyage, and ATD, and check whether the shipping schedule complies

with the criteria for inclusion. Non-compliant data are excluded from index calculation.

(2) Checking for duplicated B/L records of liner and freight forwarder. If the forwarder's freight rate is lower than the liner's, the former will not be used.

(3) Removing outliers. SSE first screens out outliers of the freight rates for 20' containers and 40' containers by applying the Grubbs or Pauta tests, then for each container type screens out the highest 10% and lowest 10% of the remaining freight rates from all sample companies.

(4) Limiting over-representation. SSE caps the container volume share of any single sample company by container type at 50%. An over-represented sample company's container volume will be reduced to 50% by multiplying the volume of each B/L with the same coefficient.

Step 3: Index Calculation

After the above steps:

(1) Calculating the average freight rate by container type. The total freight rates of all remaining B/L divided by the total container volume equals the average freight rate.

(2) Calculating the benchmarking price index by container type. The average freight rate divided by the average freight rate on the base date, and then multiplied by 1000 equals benchmarking price index by container type for the current period.

(3) Calculating SCFIS (Europe service). The weighted average of the benchmarking price index by container type is the SCFIS (Europe service).

For the details of the compilation of SCFIS (Europe service) please refer to the *Rules for Compilation of SCFI based on Settled Rates (Provisional)* published on SSE's official website.

26 How often is the SCFIS (Europe service) published? What is the base date and the base date index?

The SCFIS (Europe service) is published on SSE's official website at 15:05 each Monday (Beijing time). If a Monday is not a working day, SSE may publish the index either on that day or the following working day. In the last week of each year, SSE should announce the next year's publication date of the index on its website. In case the State Council adjusts any holiday arrangement at short notice, SSE may change the publication date accordingly. SSE should decide on whether to make the change in one working day after the State Council's notice and, if deciding to change, should announce the decision within 24 hours.

The base date is June 1, 2020, and the base date index is 1,000.

27 What special circumstances have been considered in the compilation plan of SCFIS (Europe service)?

SSE has specified the emergency compilation method for SCFIS in the *Rules for Compilation of SCFI based on Settled Rates (Provisional)*. SSE will use this method to compile SCFIS and publish the index in the case of any of the following emergencies: (1) more than one-third of the sample liners provide no freight rate by route for the current period, or the number of sample companies that provide settlement rates for a certain container type is less than five (more than or equal to one) but still meets the minimum requirement; (2) the number of sample companies in the current period meets the minimum requirement for a certain route, but no freight data is provided for a certain container type for this route; (3) a major technical failure suddenly occurs; (4) the number of sample companies in the current period fails to meet the minimum requirement for a certain route. The emergency SCFIS compiled by SSE will have the same effect as the regularly published SCFIS.

28 What are the rules of SSE regarding emergency drills for SCFIS (Europe service)?

SSE has developed contingency plans for different scenarios and set up the Index Emergency Compilation Group and Index Risk Management Group. The Index Risk Management Group is responsible for establishing a risk event database, organizing at least one emergency drill each year, and submitting emergency drill reports to the Index Oversight Committee.

29 What are the basis and procedures for the quarterly screening and adjustment of freight rate information from SCFIS (Europe service) sample companies?

SSE has developed the *Methodologies for the Quarterly Screening and Adjustment of Freight Rate Information from SCFIS Sample Companies* as the basis for the screening and adjustment. Each quarter, SSE evaluates and screens the freight rate information collected from a sample company based on whether the sample company is a panelist of the Europe-US Service Subcommittee, the weakly average number of transaction records in the previous quarter, the total number of periods without a transaction record in the previous quarter, whether there is any missed report without justification in the previous quarter, and whether the index system is subject to quarterly validation. SSE will determine the sample companies for the quarter based on the evaluation results.

30 How SSE verifies the data from sample companies?

To ensure the stable operation of the SCFIS (Europe service) data collection system and the accuracy, authenticity, integrity, uniqueness, and consistency of the data collected by such system, SSE has established a quarterly data verification regime. Under this regime, SSE: (1) verifies each quarter whether the data transmitted by each sample company to the SCFIS data collection system fall within the specification for freight rates; (2) verifies each quarter the observance of freight rate specification by all sample companies and the operations of the interconnected IT systems; and (3) verifies the production system of each sample company through site inspection or videos.

31 How to correct miscalculated SCFIS (Europe service)?

SSE has formulated the Measures of *Shanghai Shipping Exchange for the Correction of Index Errors*, providing for the correction of SCFIS errors, including errors of external data sources, errors in index compilation, and failures of software, hardware, and other infrastructures. In case a significant error is found in a published index, SSE will decide on whether to recalculate and republish the index after prudent assessment and consultation with the Index Expert Committee. In general, SSE will not deal with any error that occurred more than six months ago.

32 Under what circumstances will SSE suspend the publication of SCFIS (Europe service)?

If there lacks sources of data in the spot market for calculating the index due to force majeure (including but not limited to earthquake, war, and strike), SSE has the right to suspend the publication of the index and make a timely announcement.

The publication of the index has never been suspended since its publication on November 2, 2020.

33 Under what circumstances will SSE terminate the publication of SCFIS (Europe service)?

SSE has formulated the *Measures of Shanghai Shipping Exchange for Termination of Indices*, which stipulates that termination will be considered only when any of the following circumstances occurs: (1) there lacks data sources for index calculation, or the quality of available data sources is not high enough to support stable and accurate index calculation; (2) the index cannot reflect market reality due to any significant changes in market structure and other reasons; (3) there lacks sufficient samples; (4) any regular index review suggests the termination of the index; or (5) any applicable laws or regulations require the termination of the index or any other reasons.

As long as it is feasible, SSE should announce the termination of the index on its official website at least three months in advance and state the background and schedule for the termination. After the announcement, SSE should continue the daily maintenance, calculation, and publication of the index until the termination date.

34 What are the confidentiality rules applicable to the information submitted by the panelists of the Index Compilation Committee?

SSE has developed the *Confidentiality Rules for the Compilation of Containerized Freight Index*, which requires the index compilation team and relevant SSE personnel to strictly observe the confidentiality requirements. The relevant personnel have signed a confidentiality undertaking with SSE. Any disclosure in violation of the Confidentiality Rules will be investigated and handled in accordance with the *Law of the People's Republic of China on Guarding State Secrets* and applicable SSE rules.

35 What is the review process of SCFIS (Europe service)? What are the confidentiality measures for the index compilation personnel?

In general, SCFIS (Europe service) is compiled and published automatically by SSE's system. Only when the system automatically sends out a warning can authorized emergency personnel enter the emergency response office specially set up by the SSE to review system data and take corresponding actions.

Design of SCFIS (Europe Service) Futures Contract

36 What are the general design principles behind the SCFIS (Europe service) futures contract?

SCFIS (Europe service) futures (EC) contract is designed based on the general principles of “service index, international platform, RMB denomination, and cash settlement” to fully engage overseas traders.

37 Why is SCFIS (Europe service) chosen as the underlying index?

In selecting the underlying index, INE has taken into account the state of the spot market (e.g., freight rate scale, market structure, number of participants, degree of internationalization, and standardization of freight rate), shipping index profile (e.g., its influence and volatility), alignment with national strategies (e.g., whether the index is helping build China into a country with strong maritime and shipping industry and Shanghai into an international financial center and international shipping center), and the supporting policies. INE finally chose SSE and use its SCFIS (Europe service) as the underlying index for the EC contract.

38 What are the specifications of EC contracts?

The specifications for a standard EC contract are as follows:

Underlying	Shanghai (export) Containerized Freight Index based on Settled Rates (Europe service)
Contract Multiplier	50 Yuan per index point
Price Quotation	Index point
Minimum Price Fluctuation	0.1 index point
Listed Contracts	February, April, June, August, October, and December
Trading Hours	9:00–11:30 a.m., 1:30–3:00 p.m., and other trading hours specified by INE
Daily Price Limit	Within ±10% of the settlement price of the preceding trading day
Minimum Trading Margin	12% of contract value
Last Trading Day	The last futures-trading Monday of the delivery month (INE reserves the right to adjust the last trading day based on national holidays and weekends)
Delivery Period	Same as the last trading day
Delivery Type	Cash settlement
Product Symbol	EC
Listing Exchange	Shanghai International Energy Exchange

39 Why is the contract multiplier set to 50 yuan per index point?

The contract multiplier is one of the defining parameters of an index futures contract. An overly large multiplier will create a high barrier to market access. But if it is too low, the contract would not meet the significant hedging needs of the industry players and would likely attract short-term speculative funds and cause excessive speculation. Therefore, INE believes 50 yuan/index point is a reasonable figure for the contract multiplier.

Each EC contract is valued at RMB 50,000 based on the base date value of the index (1,000 pts) on June 1, 2020, RMB 71,000 based on the value of the index (1,431.75 pts) when it was officially released on November 2, 2020, and RMB 518,673 based on the high value of the index (10,373.45 pts) on September 20, 2021.

40 Why are EC contracts priced and settled in RMB?

This will create additional applications for RMB and also promote the higher-quality development and opening up of China's futures market.

41 Why is the minimum price fluctuation set to 0.1 index point?

Domestic and overseas index futures generally have a minimum price fluctuation of 0.1 to 0.5 points. Past data show that the freight market is cyclical, comprising periods of stable prices and periods of volatile prices. The minimum price fluctuation is set to 0.1 points to primarily account for the stable periods. This size can fairly accurately capture the changes in the spot index and readily cover the various quotation ranges for the futures contract.

42 What are the contract months?

In view of the characteristics of the spot market and other domestic and overseas index futures contracts, and seeking to prevent risks, ensure a smooth start, INE lists the EC contracts for even months, i.e., February, April, June, August, October, and December.

43 What are the trading hours of EC contracts? Is continuous trading available?

The trading hours of EC contracts are 9:00-11:30 a.m. and 1:30-3:00 p.m.; continuous trading will not be available at the primary stage after listing.

44 What's the daily price limit?

The daily price limit of EC contracts is ±10% of the previous settlement price; that on the last trading day is ±20% of the previous settlement price.

45 What is the margin rule for EC contracts?

As the daily price limit of EC contracts is ±10%, INE plans to set a minimum trading margin requirement of 12%. In regular trading, the margin requirement will be 12%. In delivery months, INE implements a progressive margining system to address the uncertainty created by fluctuations of the spot index. Specifically, the minimum trading margin is raised to 20% starting from the seventh trading day before the last trading day, and to 30% starting from the second trading day before the last trading day.

At the primary stage after listing, if an investor holds long and short positions, margin is required for both positions instead of the larger-side position only.

In addition, INE may adjust the trading margin requirement through announcements based on the level of market risks.

46 How were the last trading day and delivery date determined?

To ensure that the spot index publication date, the last trading day and cash settlement date of an EC contract fall on the same date, and to avoid the impact of long holidays, INE has chosen the last futures-trading Monday in the delivery month of the contract as its last trading day. Also, this date is subject to change based on national holidays and weekends.

The delivery date is the same as the last trading day.

Trading Access

47 Does the “one account-one trading code” system offers any solution that allows one firm to distinguish between the trades of its different sub-accounts?

INE implements the “one account-one trading code” system; aggregation or netting of the positions of multiple clients is not allowed. This means Futures Firm Members (“FF Members”), Overseas Special Brokerage Participants (“OSBPs”), and Overseas Intermediaries should apply for a unique trading code for each of their clients. Special institutional clients that are required by Chinese laws, regulations, ministry-level rules, and other policies to manage assets under segregated accounts may, for purposes of futures trading, apply for a trading code for each such segregated account.

48 How can overseas institutions and individuals access the EC market?

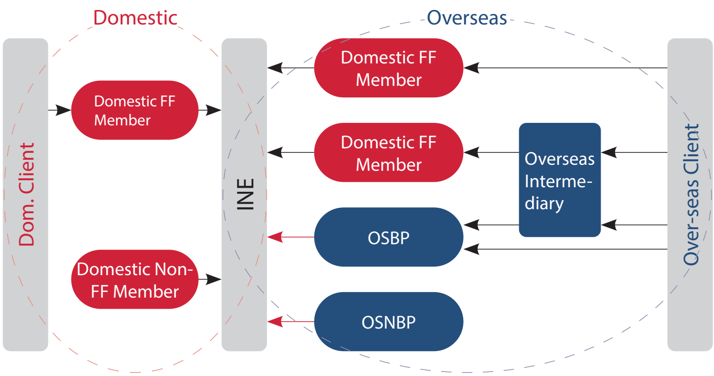
There are four ways for overseas traders to access the EC market:

Model 1: Directly through an FF Member;

Model 2: Through an Overseas Intermediary that has a carrying-brokerage relationship with a domestic FF Member or OSBP;

Model 3: Through an OSBP that has direct trading access to INE, with clearing and delivery completed with the assistance of a domestic FF Member;

Model 4: Directly as an Overseas Special Non-Brokerage Participant ("OSNBP"), with clearing and delivery completed with the assistance of a domestic FF Member.



Note: Black arrows indicate trading, clearing, and delivery. Red arrows indicate direct trading access to INE, but Overseas Special Participants ("OSPs") must complete clearing and delivery through domestic FF Members.

49 What are the eligibility criteria for trading EC contracts?

Investors intending to trade EC contracts should meet the eligibility requirements under the *INE Futures Trading Participant Eligibility Management Rules* (referenced in the table below). The Account Opening Institution shall take full use of the available information. When applying for trading access for Containerized Freight Index (Europe Service) Futures, and any investor that are already eligible to trade products subject to the eligibility rules may be exempted from the eligibility review while opening accounts at the same account-opening institution, and from basic knowledge, trading experience, and capital requirements while opening account at a different account-opening institution.

Type of Investor	Requirements
Institutional Investor	1. Having relevant business professionals who understand the essentials of futures trading and the rules of INE;
	2. Having recognized trading experiences and trading records in futures, options, and centrally cleared derivatives;
	3. Having a balance of no less than RMB 100,000 or its equivalent in foreign currency in its margin account for five consecutive business days before applying for the trading code or trading access;
	4. Having sound internal control and risk management systems;
	5. Having not been prohibited from entering the futures market or restricted in futures trading.
Individual Investor	1. Understanding the essentials of futures trading;
	2. Having recognized trading experiences and trading records in futures, options, and centrally cleared derivatives;
	3. Having a balance of no less than RMB 100,000 or its equivalent in foreign currency in its margin account for five consecutive business days before applying for the trading code or trading access;
	4. Having not been prohibited from entering the futures market or restricted in futures trading.

50 Does an overseas individual trader have to open an account at a bank in China to trade EC contracts?

An overseas individual trader may trade EC contracts at INE through an FF Member in China or an overseas broker. In the case of an FF Member, the overseas individual trader must open a dedicated futures settlement account at a Designated Depository Bank in China. In the case of an overseas broker, there is no need to open an account at a bank in China.

51 If a Europe-registered investor trades EC contracts through a European or U.S. broker, is the investor required to report transactions to a competent authority pursuant to the *European Market Infrastructure Regulation* (EMIR)?

At present, INE has completed registration in Hong Kong and Singapore and acquired ATS and RMO licenses respectively, and is committed to further strengthening cooperation with international markets.

Given the large number of countries in Europe as well as the dual regulation of EU and home-country authorities, European and U.S. brokerage firms should take special care in managing client eligibility and in conducting businesses according to local laws and regulations. Similarly, futures firms that have partnered with European or U.S. brokers should be familiar with the overseas legal system (including the *General Data Protection Regulation* (GDPR)) in advance, so as to conduct business legally and compliantly.

52 Can a domestic Non-FF Member trade on INE through one or more futures firms?

Article 37 of INE Membership Management Rules provides that “except otherwise approved by the Exchange, a Non-FF Member shall not open another account as a Client to engage in futures trading.” Therefore, a corporate entity may not trade through a broker as a client if it is already a Non-FF Member.

53 Can mutual funds trade EC contracts?

Domestically, mutual funds have been recognized as a type of Special Institutional Clients and, as such, can open special institutional client accounts to trade EC contracts. China Futures Market Monitoring Center(CFMMC) is now accepting account-opening applications from overseas Special Institutional Clients.

54 Does INE accept English documents in trading activities and document signing? And does INE provide English versions of regulations, rules, notices, and circulars?

The INE accepts feedback in English during the drafting and amendment of its rules, and bilingual (Chinese and English) documents during account opening as well as for other application materials from Overseas Intermediaries and Overseas Special Participants (OSPs). According to Article 41 of the *INE Overseas Special Participant Management Rules*, unless otherwise recognized by the Exchange for all application materials submitted by Overseas Intermediaries and OSPs to INE, the Chinese version prevails. INE will try its best to publish laws, rules, notices, and circulars in both Chinese and English; but as legal texts, the Chinese version is deemed definitive.

55 For overseas clients, which overseas trading platforms have access to the EC market at the INE?

Currently, trading software such as CQG, PATs, Bloomberg, Tradex, Esunny, and TT have access to the EC market, and clearing system FIS has access to CTP. INE is actively working with the major international trading platforms to assist their smooth access.

Clearing and Risk Management

56 How is the daily settlement price of an EC contract determined?

The daily settlement price of an EC contract is the volume-weighted average price of all trades in that contract executed on that trading day. For special-case situations, please refer to Articles of the *INE Clearing Rules*.

57 How is the final settlement price of an EC contract determined?

The final settlement price of an EC contract is the benchmark price for its final settlement, and is now set to the arithmetic mean value of the three SCFIS (Europe service) values published by the SSE on the last trading day of the contract and on the first and second index publication days before the last trading day. In terms of formula:

$$P_T = \frac{P_1+P_2+P_3}{3}$$

P_T: The final settlement price of a containerized freight index (Europe Service) futures contract

P_1: The index point value published by the Shanghai Shipping Exchange on the second index publication day before the last trading day of the contract

P_2: The index point value published by the Shanghai Shipping Exchange on the first index publication day before the last trading day of the contract

P_3: The index point value published by the Shanghai Shipping Exchange on the last trading day of the contract

58 What if SSE fails to publish the underlying index for calculating the final settlement price of an EC contract?

If SSE fails to publish the underlying index for calculating the final settlement price of an EC contract on time, the final settlement of the contract will be affected. In this case, INE will wait for the publication for a reasonable period. If SSE still fails to publish P_1 and P_2 before 3:05 p.m. Beijing time on the Wednesday of the week when they should be published, or fails to publish P_3 before 3:30 p.m. Beijing time on the day when it should be published, INE may determine P_1, P_2, and P_3 based on market conditions and announce them to the market on a timely basis.

59 What risk control measures will be taken if the cumulative price change in an EC contract reaches a certain percentage (but does not trigger a continuous limit-locked market)?

If the cumulative price change (denoted as N) in an EC contract reaches 18% over 3 consecutive trading days (denoted as D1-D3), or 24% over 4 consecutive trading days (denoted as D1-D4), or 30% over 5 consecutive trading days (denoted as D1-D5), INE may, in view of market conditions, take one or a combination of measures stipulated by Article 9 of the *Risk Management Rules of the Shanghai International Energy Exchange*, and report to the CSRC in advance. The measures include: (1) require additional trading margin from some or all of the Members and/or OSPs on long and/or short position, at the same or different rates of margin rates; (2) limit the withdrawal of funds by some or all of the Members; (3) suspend the opening of new positions for some or all of the Members and/or the OSPs; (4) adjust the price limit, but not to be over 20% up or down; (5) require the liquidation of positions by a prescribed deadline; (6) exercise forced position liquidation; and/or (7) take other measures INE deems necessary.

60 What risk control measures will be taken if an EC contract triggers a same direction limit-locked market?

If a same direction limit-locked market exists on the last 5 trading days (and D1 falls on one of these 5 trading days), trading is permitted until the final settlement. The risks of any other same direction limit-locked market will be managed in accordance with INE's existing risk control rules on limit-locked market.

61 How is the position limit of EC contracts designed?

To prevent investors from using their capital strength to manipulate the open interest and thus influence futures trading prices, and to achieve different purposes at different periods of trading, INE imposes different relative and absolute position limits on EC contracts. The specific limits at different periods of trading are as follows:

<table>
<tr><th rowspan="3"></th><th colspan="2">From the Day of Listing to the Delivery Month</th><th colspan="2">From the Day of Listing to the Eighth Trading Day Before the Last Trading Day</th><th colspan="2">From the Seventh Trading Day Before the Last Trading Day to the Third Trading Day Before the Last Trading Day</th><th colspan="2">From the Second Trading Day Before the Last Trading Day to the Last Trading Day</th></tr>
<tr><th rowspan="2">Open interest of an EC contract (lots)</th><th>Relative limit (%)</th><th colspan="2">Absolute limit (lots)</th><th colspan="2">Absolute limit (lots)</th><th colspan="2">Absolute limit (lots)</th></tr>
<tr><th>FF Member, OSBP, Overseas Intermediary</th><th>Non-FF Member, OSNBP</th><th>Client</th><th>Non-FF Member, OSNBP</th><th>Client</th><th>Non-FF Member, OSNBP</th><th>Client</th></tr>
<tr><td>EC contract</td><td>≥ 30,000</td><td>25</td><td>1200</td><td>1200</td><td>360</td><td>360</td><td>120</td><td>120</td></tr>
</table>

Note: The open interest and the position limits in the table are counted by either long or short positions.

62 Is a trading limit set for EC contracts?

To control market risks, Non-FF Members, OSNBPs, and Clients may not open more than 1,000 lots on an EC contract in a single day from the date of listing.

63 How is high-frequency trading regulated for EC contracts?

INE will charge order submission fees for Clients whose message amount (the number of trading orders such as order placement and order cancellation) and order to trade ratio (OTR) reach a certain threshold on EC contracts. Below are the order fee rates for the EC futures contract:

Order-to-Trade Ratio (OTR) / Message Amount (MA)	OTR ≤ 2	OTR>2
1≤MA≤4,000	0	0
4,001≤MA≤8,000	0.01 yuan/count	0.02 yuan/count
8,001≤MA≤40,000	0.05 yuan/count	0.1 yuan/count
40,001≤MA	1 yuan/count	2 yuan/count

Notes: message amount = total number of trading orders such as order placement, order cancellation, and RFQ; OTR= (message amount / number of executed orders) – 1. If the actual number of executed orders is 0, it would be treated as 1 for calculating OTR. The message amount mentioned above includes order placement and cancellation resulting from fill-or-kill (FOK) orders and fill-and-kill (FAK) orders.

64 Will market makers be introduced to the EC market?

INE will introduce market makers to the EC market to provide liquidity.

65 What happens if the underlying index is not published for three consecutive weeks or is terminated?

If the underlying index is not published for three consecutive weeks or is terminated, INE may, subject to the INE Risk Management Rules and the approval of its Board of Directors, take the following emergency measures to mitigate risks and announce an abnormal situation has occurred: adjusting the market opening and closing time, suspending trading, terminating trading, adjusting the price limit, raising the margin requirement, requiring the liquidation of positions by a prescribed deadline, carrying out forced liquidation, suspending funds withdrawals, carrying out forced position reduction, and restricting trading, among others.

66 What risk control measures will be taken if significant uncontrollable factors in the spot market or underlying index occurs?

During the trading of the containerized freight index (Europe Service) futures, in case that war, social instability, natural disasters, significant uncontrollable risks of underlying index or other factors are having or are going to have a significant impact on the trading of containerized freight index (Europe Service) futures, the CEO of the Exchange may take emergency measures such as adjusting the opening and closing time of the market, suspending or terminating trading. Upon settlement on the relevant day when the trading is terminated, the Exchange may liquidate positions of all or part of the containerized freight index (Europe Service) futures contract months based on the settlement price of the immediately preceding trading day.

67 What measures will INE take when the underlying index is corrected?

To maintain an orderly futures market, the *INE Delivery Rules* provides that, after 3:30 p.m. Beijing time on the last trading day of an EC contract, the final settlement price for the contract as determined by INE rules is not subject to further adjustment.

68 How to perform currency exchange for trading EC contracts?

EC contracts are priced and settled in RMB. Overseas traders and overseas brokers may post margin in RMB or directly in USD, but USD-denominated margin can be used for clearing purposes only after it is exchanged into RMB.

For overseas traders and overseas brokers, the purchase and sale of RMB must be based on the actual results of their trades in EC contracts, and may only be performed for payments in connection with such trades, such as for settling profits and losses, paying transaction fees, making or receiving delivery payment, and depositing additional cash funds for clearing purposes.

69 For overseas traders, how are fund transfers handled for EC contracts?

EC contracts are classified as a Specified Domestic Product. According to PBC's Announcement [2015] No. 19 and SAFE's Circular Huifa [2015] No. 35 and related Q&As, overseas investors and overseas brokers may transfer offshore RMB or USD to onshore bank accounts to trade Specified Domestic Products. These funds will be deposited in dedicated accounts under closed-loop management, and may not be used for any purpose other than the trading of Specified Domestic Products. Fund transfers should comply with the scope of payments and receipts prescribed by relevant policies.

70 For risk management purposes, will the positions held by subsidiaries of the same parent company be managed separately or be aggregated and managed on a net basis?

Long and short positions under each entity's trading code are subject to the position limits set out in applicable rules, and are calculated separately without netting. Additionally, if several entities are not linked by actual control relationship, their positions will be managed separately; if the entities are linked by actual control relationship, non-FF Members and OSNBPs are required to report accounts linked by actual control relationship to INE, while clients should do so with CFMMC. INE obtains information about these accounts from CFMMC, and aggregates and manages relevant positions accordingly.

71 What are INE's rules for hedging and arbitrage of EC contracts?

INE manages hedging activities through a review and approval system. If a trader believes that the regular position limit is too low to meet its hedging needs, it may apply to INE for a hedging quota.

In relation to the hedging and arbitrage positions in an EC contract, the regular months are the period from the listing day to the eighth trading day before the last trading day; the nearby delivery month is the period from the seventh trading day before the last trading day to the last trading day.

For an EC contract, the application for hedging quota for regular months should be submitted between the listing day and the eighth trading day before the last trading day. No late application will be accepted.

The application for hedging quota or arbitrage quota for nearby delivery months should be submitted between the first trading day of the month before the delivery month and the fifth trading day before the last trading day. No late application will be accepted.

The hedging quota for nearby delivery months may be used in a revolving manner starting from the seventh trading day before the last trading day until the second trading day before the last trading day.

72 Can letters of credit be posted as margin?

Currently, INE does not accept letters of credit as margin collateral.

73 Can OSNBPs and overseas clients post foreign currency as margin?

OSNBPs and overseas clients can use foreign currency as margin. If foreign currency is used, the day's CNY (RMB) central parity rate published by the China Foreign Exchange Trade System (CFETS) will be used to calculate the market value of the foreign currency. At present, INE rules state that USD is the only foreign currency accepted as margin, at a haircut of 0.05. Before market close on a given day, the market value of foreign currency is provisionally determined by the CNY central parity rate published by CFETS on the previous trading day. This value will be revised and discounted during daily clearing according to the rules above.

74 Is it true that for OSNBPs and overseas clients, foreign currency can only be used as trading margin, while all expenses and profits and losses resulting from futures trading must still be settled in RMB?

Yes.

As a Specified Domestic Product, EC contracts are subject to the following provisions of PBC's Announcement [2015] No. 19:

> "II. Domestic crude oil futures transactions shall be priced and settled in RMB….
>
> "IX. A foreign trader or foreign brokerage agency may directly use foreign [currency] as the margin, and the foreign [currency] margin may not be used for the settlement of domestic crude oil futures funds until it has been settled [i.e. exchanged into RMB]….
>
> "XIII. This Announcement shall apply, mutatis mutandis, to the cross-border settlement of transactions in other specified domestic futures products approved by the China Securities Regulatory Commission."

In addition, Article 23 of the *INE Clearing Rules* provides that "the clearing currency at INE is RMB"; Article 74 provides that subject to the approval of INE, foreign exchange and assets with stable value and high liquidity, such as standard warrants and book-entry government bonds issued by the Ministry of Finance of the People's Republic of China in the Chinese Mainland, may be used as margin collateral."

75 Does currency exchange for futures trading have to be performed at a Designated Depository Bank?

The purchase and sale of currencies for futures trading must be completed at a Designated Depository Bank. When exchanging currencies, an INE member may check the real-time exchange rate offered by various Designated Depository Banks and choose a suitable one.

76 Articles 39 and 40 of the *INE Clearing Rules* state that, "If, after the completion of daily clearing, the clearing deposit balance of any internal ledger of a Member with the Exchange is lower than the prescribed minimum requirement, such clearing result shall be deemed as the Exchange's margin call to the Member, and the gap between the two amounts shall be the amount of additional funds required by the margin call. … If a deficiency still exists, the Member shall make it up before the market opening of the next trading day." What action will INE take, if a member fails to make up for the difference following the margin call?

Article 40 of the *INE Clearing Rules* lists the actions INE will take in the event that a member fails to meet the required clearing deposit balance on any internal ledger: if the balance is zero or positive, the corresponding member or OSP will be prohibited from opening new positions; if the balance is negative, INE will carry out forced liquidation or take other necessary measures according to the INE Risk Management Rules.

77 Is it required for an overseas company that trades through a domestic FF Member to open a dedicated bank account for futures trading?

If an overseas trader or overseas broker directly engages a domestic futures firm for clearing (or trading and clearing) services, it must open a futures settlement account at a Designated Depository Bank that is qualified to offer margin depository services for overseas clients.

78 Can a domestic Non-FF Member open a foreign exchange account for trading EC contracts?

The short answer is "no."

According to SAFE Circular Huifa [2015] No. 35, only overseas traders, overseas brokers, as well as futures firms and other institutions that are qualified to clear trades and are providing trading, clearing, and other related services to overseas traders and overseas brokers in relation to Specified Domestic Products, may open a dedicated foreign exchange account for those purposes.

Delivery

79 Why do EC contracts adopt cash settlement?

The EC contract is an index derivative and most index derivatives are cash-settled. Cash settlement simplifies the delivery process, reduces delivery costs, and makes delivery more efficient.

80 What is the cash settlement process for EC contracts?

EC contracts employ cash settlement, the delivery should be made in integral multiples of one lot. After market close on the last trading day, INE will clear and transfer the profits and losses of the trading parties at the final settlement price and close out the remaining open positions.

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