

3 August 2015

Mr. Christopher J. Kirkpatrick  
Secretary  
Commodity Futures Trading Commission  
Three Lafayette Center  
1155 21<sup>st</sup> St., N.W.  
Washington, DC 20581  
United States of America

Dear Mr. Kirkpatrick,

**Submission of Swaps Contract for the Commission's Mandatory Clearing Determination**

**1 Introduction**

1.1 Singapore Exchange Derivatives Clearing Limited ("**SGX-DC**"), a derivatives clearing organisation ("**DCO**") registered with the Commodity Futures Trading Commission (the "**Commission**"), hereby submits the following contracts (the "**Contracts**") for the Commission's mandatory clearing determination under Commission regulation 39.5(b):

- (a) Capesize Time Charter Basket (5 routes); and
- (b) Capesize Option (5 routes).

1.2 The required submission cover sheets are attached as Appendix 1.

**2 Commencement of Clearing**

2.1 SGX-DC intends to begin accepting the Contracts for clearing from September 2015 or later.

**3 Eligibility to Clear**

3.1 Pursuant to Commission regulation 39.5(a)(1), SGX-DC is eligible to clear the Contracts as it is within the same class of swaps as those it already clears.

**Singapore Exchange Derivatives Clearing Limited**

Company Reg No. 200005878M  
(A wholly-owned subsidiary of Singapore Exchange Limited)

2 Shenton Way, #02-02 SGX Centre, Singapore 068804  
Main: (65) 6236 8888 Fax: (65) 6535 0775

[www.sgx.com](http://www.sgx.com)

#### 4 Required Information under Commission regulation 39.5(b)(3)

*Existence of significant outstanding notional exposures, trading liquidity and adequate pricing data*

- 4.1 Singapore Exchange Limited (“**SGX**”) has been clearing Freight Swaps on SGX-DC since 2006. Baltic Exchange (“**Baltic**”), which has been providing prices for the Baltic Exchange Capesize Time Charter Average index in respect of the Capesize Time Charter Basket (4 routes) and SGX Baltic Capesize Time Charter Average (4 routes) Futures (“**172 4TC**”), has, in response to the changing needs of the maritime shipping industry,<sup>1</sup> decided to introduce the Baltic Exchange Capesize Time Charter Average index based on 5 routes as well as a new vessel description (180,000 mt dwt instead of 172,000 mt dwt) (“**180 5TC**”), to replace the 172 4TC index.
- 4.2 Following the Baltic’s decision, SGX proposes to introduce the new Capesize Time Charter Basket (5 routes) and the Capesize Option (5 routes) for clearing to expand the existing suite of Freight Swaps. The Contracts based on the 180 5TC are intended to eventually replace the contracts based on the 172 4TC index.
- 4.3 The price methodology used by Baltic for the 180 5TC is based on panelist-based reporting, which is similar in nature to the 172 4TC index. Baltic’s indices are the industry standard and widely accepted.
- 4.4 As there is limited historical data available for 180 5TC index<sup>2</sup> as it is still in its nascent stage of development, data from SGX’s existing contract based on the 172 4TC index will be used as a proxy for purposes of deciding the margin floor for the contracts based on the 180 5TC at launch, until such time when there is sufficient historical data on 180 5TC itself. The proxy was decided on the basis that there is a strong statistical correlation between the 172 4TC index and the 180 5TC index.

*Availability of rule framework, capacity, operational expertise and resources and credit support infrastructure to clear the contract*

- 4.6 The Contracts will be cleared under an established rule framework and operational infrastructure already in place and accepted by SGX-DC’s Clearing Members.

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<sup>1</sup> Including the changing importance of various shipping routes and increased use of bigger ships.

<sup>2</sup> Baltic is only able to provide 1 years of daily prices for 180 5TC.

- 4.7 SGX-DC has the appropriate risk management, operations and technology capabilities in place to ensure that it is able to liquidate positions in the Contracts in an orderly manner in a default.
- 4.8 The Contracts are subject to margin and clearing fund requirements set out under SGX-DC's Clearing Rules, which are available at the following link:  
[http://rulebook.sgx.com/en/display/display\\_main.html?rbid=3271&element\\_id=1903](http://rulebook.sgx.com/en/display/display_main.html?rbid=3271&element_id=1903).

*Effect on the mitigation of systemic risk, taking in account the market size and resources of SGX-DC*

- 4.9 It is noted that one of the key drivers of the Dodd-Frank Act was to address systemic risk in the over-the-counter ("OTC") derivatives market through central clearing of such products.
- 4.10 The benefits of central clearing are well-documented and include standardisation of key contract terms when settling a contract, ease of position adjustment, reduction of counterparty risk by having the central counterparty interpose itself between the initial buyer and seller and the provision of efficiencies through the consolidation of collateral management at a central point.
- 4.11 These benefits need to be weighed against the concentration of risk in a select few central counterparties.
- 4.12 SGX-DC has the necessary capability to clear the Contracts from a market size and resources perspective.

*Effect on competition, including clearing fees and charges*

- 4.13 SGX-DC does not believe that its clearing of the Contracts would have a negative or material impact on competition. The fee schedules are attached as Appendix 3.

*Existence of reasonable legal certainty in the event of SGX-DC's or its clearing members' insolvency with regard to the treatment of customer and counterparty positions and collateral*

- 4.14 SGX-DC observes the Principles for Financial Market Infrastructures jointly promulgated by the Committee on Payment and Settlement Systems and IOSCO (the "PFMI") and its procedures have been assessed to be legally certain in the event of its or its Clearing



Members' insolvency with regard to the treatment of customer and counterparty positions and collateral.<sup>3</sup>

- 4.15 SGX-DC has also previously provided a legal memorandum to the Commission on the ring-fenced treatment of cleared swaps customer collateral pursuant to Part 22 of the Commission's regulations.
- 4.16 SGX-DC's insolvency and the operation of default management mechanisms under its Clearing Rules will be governed by Singapore Law, save for certain specific Clearing Rules that relate to cleared swaps customer collateral that are governed by U.S. federal laws.

## 5 **Contract Specifications**

- 5.1 The specifications of the Contract are attached as Appendix 2.

## 6 **Participants Eligibility Standards**

- 6.1 The standards for participation in clearing of the Contracts are similar to SGX-DC's usual membership standards for Clearing Members as set out in Chapter 2 of its Clearing Rules.
- 6.2 SGX-DC imposes no participation criteria on its Clearing Members' customers, given that it faces its Clearing Members on a principal-to-principal contractual basis.

## 7 **Pricing Sources, Models and Procedures**

- 7.1 The daily settlement prices ("**DSP**") of the Contracts will be provided by Baltic, based on reporting from panellists, who are the same panelists that provide prices for the existing 4TC contracts. These are Barry Rogliano Salles ("**BRS**"), Clarksons, Freight Investor Services ("**FIS**"), GFI Group ("**GFI**") and Simpson Spence Young ("**SSY**").

Baltic will provide SGX with DSP prices for (i) the current month and next 4 months; (ii) the current quarter and next 6 quarters and (iii) 7 full calendar years, including the current calendar year. Thus, SGX will use Baltic's DSP prices in the following order of preference:

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<sup>3</sup> Please see <http://www.imf.org/external/pubs/ft/scr/2013/cr13325.pdf> for a detailed assessment of SGX-DC's observance of the PFMI by the International Monetary Fund under the Financial Sector Assessment Programme.

- (a) SGX will use Baltic's monthly price where it is available;
- (b) if Baltic's monthly price is not yet available, SGX will derive, via interpolation, monthly DSP from Baltic's prices for the quarter;
- (c) if Baltic's quarterly prices are not yet available, SGX will derive, via interpolation, monthly DSP figures from Baltic's prices for the calendar year.

This methodology is the same as the DSP methodology for SGX's existing freight contracts.

- 7.2 The final settlement prices ("**FSP**") for the Contracts will be based on the arithmetic average of Baltic's daily spot price assessments in the expiring contract month. This FSP methodology is in line with the existing practice for SGX's freight contracts.
- 7.3 Baltic provides daily spot assessment prices. This is similar to the existing SGX freight contracts which also use a daily spot assessment price from the index provider.
- 7.4 The mode of final settlement will be in cash.

## **8 Risk Management Procedures**

- 8.1 SGX-DC has examined the risk characteristics of the Contracts, including conducting back-testing on the margin methodology, and have determined that it is appropriate to apply the margin methodology used for the suite of freight products under the existing risk management framework for SGX-DC's contracts.
- 8.2 SGX-DC's risk management policies and procedures are well-established through its experience in clearing OTC derivatives products.
- 8.3 Maintenance margin is collected for each Clearing Member to cover potential losses in the event of that Clearing Member's default. The margining methodology is based on a value-at-risk model utilizing historical simulation methodology.
- 8.4 Variation margin is calculated three times a day but called once each day during the life of the Contracts until final settlement. Such variation margin is marked-to-market during each cycle and settled in cash based on the settlement currency of the Contracts.

8.5 Further to this, each Clearing Member contributes to a clearing fund which would be drawn down in the event of a default in accordance with the SGX-DC Clearing Rules. This fund is utilized to cover any shortfall over and above the margins posted by the defaulting Clearing Member due to the liquidation or auction of such Clearing Member's portfolio.

**9 Applicable Rules, Policies and Procedures**

9.1 The rules, policies and procedures that apply to the clearing of the Contracts are set out in SGX-DC's Clearing Rules, which are publicly available at the following link:  
[http://rulebook.sgx.com/en/display/display\\_main.html?rbid=3271&element\\_id=1903](http://rulebook.sgx.com/en/display/display_main.html?rbid=3271&element_id=1903)

9.2 Additional amendments to the Clearing Rules have been proposed in relation to the clearing of the Contracts. SGX-DC has filed a self-certification submission pursuant to the Commission regulation 40.6 for the Clearing Rules amendments on 27 November 2014.

**10 Public Notice of Submission**

10.1 SGX-DC has made publicly available a copy of this submission on its website at:  
[http://www.sgx.com/wps/portal/sgxweb/home/regulation/consult\\_pub/dco\\_submissions](http://www.sgx.com/wps/portal/sgxweb/home/regulation/consult_pub/dco_submissions)

**11 Contact Details**

11.1 Please do not hesitate to contact the undersigned at ludovico.cardone@sgx.com or +65 6713 7765 should you require any clarification.

Yours sincerely,



Ludovico Cardone  
Assistant Vice President  
Legal

(Regulation)

## **Appendix 1**

### **Submission Cover Sheets**

## Appendix 2

### Contracts Specifications

#### Contract Specifications for Capesize Time Charter Basket (5 routes) Swap and Capesize Option (5 routes).

Contract	Capesize Time Charter Basket (5 routes) FFA	Capesize (5 routes) Option-on-Swap
<b>Contract Size (1 lot)</b>	1 day	1 day (equivalent to 1 lot of the underlying FFA)
<b>Ticker Symbol</b>	CW	CCW, PCW
<b>Minimum Price Fluctuation</b>	US\$1 / day	US\$0.01 / lot
<b>Contract Months</b>	Up to 84 consecutive months starting with the current month. 12 consecutive months will be added upon expiry in December.	Up to 4 calendar years
<b>Position Limit</b>	A person must not own or control any combination of relevant Freight Swaps, Options and any other product traded by the Exchange and/or accepted by the Clearing House for clearing with an identical underlying, that exceeds an equivalent of 2,000 Capesize Time Charter Basket (5 routes) Swap contracts on the same side of the Market and in all Contract Months combined	
<b>Trading Hours (Singapore Time)</b>	T session: 8.00am – 8:00pm T+1 session: 8:00:01pm - 4.00am Last Trading Day: 8.00am – 8.00pm	T session: 8.00am – 8:00pm T+1 session: 8:00:01pm - 4.00am Last Trading Day: 8.00am – 8.00pm
<b>Last Trading Day</b>	Last publication day of Baltic Time Charter Average reference prices in the contract month	Last trading day of the contract month of the underlying Swap contract
<b>Final Settlement Price</b>	Arithmetic average of all Baltic's daily spot assessments in the Contract Month for the relevant underlying product, rounded to 1 decimal place	-
<b>For options only</b>		
<b>Strike Prices</b>	\$1 per day strike interval	
<b>Option Exercise</b>	European Style: An option will be exercised automatically at expiry only if it is in-the-money.	
<b>Settlement</b>	Upon exercise, a <b>call</b> option will have a value equal to final settlement price of the underlying swap contract minus the strike price, multiplied by the contract size. Upon exercise, a <b>put</b> option will have a value equal to the strike price minus the final settlement price of the underlying swap contract, multiplied by the contract size.	
<b>Fungibility</b>	The Option-on-Swap and Option-on-Futures contracts are fungible, where both share the same daily and final settlement prices and expiry dates. Once such contracts are cleared, the risk management treatment and pay-off for the two contracts are identical. Hence, a customer with equal and opposite positions in an Option-on-Swap contract and its corresponding Option-on-Futures contract will enjoy margin offsets.	



### Appendix 3

#### Fee Schedule

Clearing Fee Type		Fee (before discount)	Fee (after discount)*
Cf 1	Trading Member (Individual)	US\$ 7.00	US\$ 4.50
Cf 2	Clearing Member House Account	US\$ 7.00	US\$ 4.50
Cf 3	Trading Member (Broker) House Account	US\$ 7.00	US\$ 4.50
Cf 5	Clearing Member Customer Account	US\$ 7.00	US\$ 4.50
Cf 6	Trading Member (Broker) Customer Account	US\$ 7.00	US\$ 4.50
Cf 7	Trading Member (Proprietary) (Customer)	US\$ 7.00	US\$ 4.50
Cf 8	Clearing Member Related Company House Account	US\$ 7.00	US\$ 4.50
Cf E	Trading Member's Trading Representatives (House)	US\$ 7.00	US\$ 4.50
Cf F	Trading Member's Trading Representatives (Customer)	US\$ 7.00	US\$ 4.50
Cf G	Clearing Member's Trading Representatives (House)	US\$ 7.00	US\$ 4.50
Cf K	Trading Member (Proprietary) (House)	US\$ 7.00	US\$ 4.50

\*1) Discounted fee will apply until 31 Dec 2015; 2) Prices shown are before GST

\*Prices shown are before GST.