



55 East 52<sup>nd</sup> Street  
39<sup>th</sup> Floor  
New York, New York 10055

**BY ELECTRONIC TRANSMISSION**

Submission No. **17-07**  
July 28, 2017

Ms. Melissa Jurgens  
Secretary of the Commission  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21<sup>st</sup> Street, NW Washington, DC 20581

**Re: Listing of Commodity Swaps and Related Rule Amendments- Submission Pursuant to Section 5c(c)(1) of the Act and Regulation 40.2**

Dear Ms. Jurgens:

Pursuant to Section 5c(c)(1) of the Commodity Exchange Act, as amended (the “CEA”) and the Commodity Futures Trading Commission (the “Commission”) Regulation 40.2, ICE Swap Trade, LLC (“IST” or “SEF”) submits by written certification the terms and conditions for six (6) new cash-settled Middle Distillate contracts (the “Energy Contracts”). The Energy Contracts will be listed as permitted contracts for trading on August 1, 2017 (based on an acknowledged filing date of July 31, 2017). The Energy Contracts are bilateral uncleared swaps.

The contract terms and conditions are set forth in Chapter 13 of the ICE Swap Trade Rulebook (“Rules”) and in related amendments to existing Rules, as specified in **Exhibit A**. The underlying cash market analysis for the six (6) new Energy Contracts is contained in **Exhibit B**. A copy of the revised Rulebook marked to show changes against the Rulebook submitted to the Commission with an effective date of July 14, 2017, is attached as **Exhibit C**, and a clean copy of the revised Rulebook is attached as **Exhibit D**. All updates are summarized in the table below:

<b>Rule</b>	<b>Contract Name</b>
1388	Singapore Gasoil 10 ppm Swap
1389	Singapore Gasoil 10 ppm Balmo Swap
1390	Singapore Gasoil 10 ppm Swap vs Singapore Gasoil Swap
1391	Singapore Gasoil 10 ppm Swap vs Singapore Gasoil Balmo Swap
1392	Singapore Jet Kero vs Singapore 10 ppm Gasoil Swap
1393	Singapore Jet Kero vs Singapore 10 ppm Gasoil Balmo Swap

## **Certifications**

IST certifies that the rules and amendments related to the listing of the Energy Contracts comply with the requirements of the CEA and the rules and regulations promulgated by the Commission thereunder. IST has reviewed the Core Principles and has determined that the listing of the Energy Contracts impacts the following relevant Core Principles:

**COMPLIANCE WITH RULES (Principle 2):** The terms and conditions of the Energy Contracts are set forth in Chapter 13 of the Rules, which will be enforced by IST. Trading of the Energy Contracts are subject to all relevant IST rules which are enforced by the Market Regulation Department.

**SWAPS NOT READILY SUSCEPTIBLE TO MANIPULATION (Principle 3):** In accordance with the guidelines set forth in Appendix C to Part 38 of the CEA, the Energy Contracts should not be readily subject to manipulation as they are based on deep and liquid cash markets and widely accepted benchmarks as demonstrated in the analysis included in Exhibit B. The contract size, listing cycle, quotation basis, final settlement and minimum price fluctuation for the Energy Contracts are common amongst related contracts listed by other SEFs and DCMs. In addition, the Energy Contracts will be subject to market surveillance by IST Market Regulation staff to detect attempted manipulation.

Platts, the administrator of the referenced indices, has established comprehensive rules governing assessment prices and price reporting structures that is publically available, transparent, and widely accepted and understood by market participants. The prices included in all of Platts' indices are subjected to a rigorous series of quality control processes. Platts publishes benchmark price assessments for oil markets and its price reporting is well known in the industry as fair and accurate. The oil indexes Platts publishes are based on original reporting that is collected by Platts from actual buyers and sellers. Platts also employs a comprehensive compliance review of submissions and its methodologies to ensure the published prices accurately reflect physical deals. Platts' rules, index descriptions and pricing methodology for oil is publically available on its website<sup>1</sup>.

**MONITOR OF TRADING AND TRADE PROCESSING (Principle 4):** All contracts listed for trading by IST are subject to prohibitions against abusive trading practices as set forth in Chapter 5 of the IST Rulebook. The Market Regulation staff actively monitors all IST markets to detect abusive practices.

**ABILITY TO OBTAIN INFORMATION (Principle 5):** IST has rules and procedures in place that allow for the collection of non-routine data from Participants and Customers. In addition, IST has agreements in place with other regulatory, data repository and reporting services.

**TIMELY PUBLICATION OF TRADING INFORMATION (Principle 9):** IST will publish on its website and distribute through quote vendors contract trading volume, open interest levels, and daily price information in accordance with Part 16. IST will also adhere to the reporting requirements as detailed in Part 43 and 45<sup>2</sup> of the Commission's Rules. Prior to the commencement of trading, the terms and conditions for the Energy Contracts will be available on IST's website. In addition, IST will publish on a daily basis the settlement prices, volume, open interest and the opening and closing ranges for actively traded contracts.

**RECORDKEEPING AND REPORTING (Principle 10):** IST has rules and procedures in place to require Participants and Customers to maintain records of their trading and provide for the recording and storage of the requisite trade information sufficient for the Market Regulation Department to detect and prosecute customer and market abuses.

**DISCIPLINARY PROCEDURES (Principle 13):** Pursuant to Chapters 8 of the IST Rulebook, the Market Regulation Department has the authority to sanction, suspend or expel members and market participants that

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<sup>1</sup> <http://www.platts.com/methodology-specifications/oil>

<sup>2</sup> 17 CFR Part 43 Real-Time Public Reporting of Swap Transaction Data and 17 CFR Part 45 Swap Data Recordkeeping and Reporting Requirements.



violate SEF rules.

**DISPUTE RESOLUTION (Principle 14):** Participants may arbitrate claims arising from trading of IST's contracts in accordance with Chapter 9 of the IST Rulebook. Such arbitration is mandatory for claims by customers against SEF Participants and for claims by SEF Participants against each other. Non-Participants with claims arising from trading of IST's contracts may also opt for SEF arbitration.

IST not aware of any substantive opposing views expressed with respect to the rules and the amendments. IST further certifies that concurrent with this filing, a copy of this submission was posted on its website, which may be accessed at: (<https://www.theice.com/swap-trade/regulation>).

If you have any questions or need further information, please contact the undersigned at (212) 323-8512 or (Cathy.OConnor@theice.com).

Sincerely,

A handwritten signature in blue ink, appearing to read "Cathy O'Connor".

Cathy O'Connor  
Chief Compliance Officer

cc: Division of Market Oversight

## EXHIBIT A

### CHAPTER 1: COMMODITIES CONTRACT TERMS AND CONDITIONS

#### Rule 1301. Scope.

(a) The rules in this Chapter govern the trading of Commodity Contracts. Any matters not specifically covered herein related to trading, settlement or otherwise related to Transactions involving Commodity Contracts shall be governed by the Rules of the SEF. In the event of any inconsistency between the Rules in this Chapter and any other SEF Rule, the Rules in this Chapter shall govern.

(b) The SEF shall list for trading hereunder Commodity Contracts as may be designated by the SEF from time to time.

#### Rule 1302. Definitions.

As used in this Chapter, the following terms shall have the following meanings:

##### **Commodity Contract**

The term “Commodity Contract” shall include Commodity Swaps, Option on Commodity Swaps, and any other interests or instruments traded on or subject to the Rules.

##### **CAISO**

The Term “CAISO”, or its successor, shall mean the California Independent System Operator which reports market prices on its website at [oasis.caiso.com](http://oasis.caiso.com) or its successor.

##### **Contract Period**

The Term “Contract Period” shall mean the expiration month or date of the Contract.

##### **ERCOT**

The Term “ERCOT” shall mean the Electric Reliability Council of Texas, or its successor, which reports market prices on its website at [www.ercot.com](http://www.ercot.com) or its successor.

##### **Gas Daily**

The Term “Gas Daily” shall mean Platts Gas Daily, or any successor publication, published by The McGraw-Hill Companies Inc. or its successor.



### **Inside FERC**

The Term “Inside FERC” shall mean Platts Inside F.E.R.C.’s Gas Market Report, or any successor publication, published by The McGraw-Hill Companies Inc. or its successor.

### **ISO**

The term “ISO” shall mean Independent System Operator.

### **ISO New England**

The Term “ISO New England” shall mean the Independent System Operator of New England, or its successor, which reports market prices on its website at [www.iso-ne.com](http://www.iso-ne.com) or its successor.

### **Last Trading Day**

The term “Last Trading Day” shall mean the last day on which trading is permitted for swap in accordance with the Rules.

### **LMBP**

The term “LMBP” shall mean locational based marginal pricing.

### **LMP**

The term “LMP” shall mean locational based marginal pricing.

### **MISO**

The Term “MISO” shall mean the Midwest Independent Transmission System Operator, Inc., or its successor, which reports market prices on its website at [www.midwestiso.org](http://www.midwestiso.org) or its successor.

### **MMBTU or MMBtu or mmbtu**

The Term “MMBTU”, “MMBtu” and “mmbtu” each means one million British thermal units

### **NYISO**

The Term “NYISO” shall mean the New York Independent System Operator, or its successor, which reports market prices on its website at [www.nyiso.com](http://www.nyiso.com) or its successor.

## **PJM**

The Term “PJM” shall mean the PJM Interconnection regional transmission organization, or its successor, which reports market prices on its website at [www.pjm.com](http://www.pjm.com) or its successor.

## **Platts Asia-Pacific/Arab Gulf Market ~~S~~scan**

The Term “Platts Asia-Pacific/Arab Gulf Marketscan” shall mean Platts Asia-Pacific/Arab Gulf Marketscan, or any successor publication, published by the McGraw-Hill Companies Inc. or its successor.

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## **Platts Crude Oil Marketwire**

The Term “Platts Crude Oil Marketwire” shall mean Platts Crude Oil Marketwire, or any successor publication, published by the McGraw-Hill Companies Inc. or its successor.

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## **Platts European Marketscan**

The Term “Platts European Marketscan” shall mean Platts European Marketscan, or any successor publication, published by The McGraw-Hill Companies Inc. or its successor.

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## **Pricing Calendar**

The Term “Pricing Calendar” shall mean the holiday calendar relevant for determining the publication dates of a Reference Price.

## **Pricing Date**

The Term “Pricing Date” shall mean the day on which the applicable prices are announced or published by the Price Source.



### **Price Source**

The Term “Price Source” shall mean the publication (or such other origin of reference) containing (or reporting) the Specified Price (or prices from which the Specified Price is calculated).

### **Reference Price**

The Term “Reference Price” shall mean any of the commodity reference prices specified in the 2005 ISDA Commodity Definitions, or any successor publications, or a commodity reference price specified using the commodity reference price framework described in the 2005 ISDA Commodity Definitions, or its successor.

### **Specified Price**

The Term “Specified Price” shall mean the explicit price reported in or by the Price Source, or capable of being determined from information reported in or by, the relevant Price Source.

### **Rule 1303. Trading Hours.**

Trading in Commodity Contracts is available at all times except during system maintenance. Maintenance windows are reserved each weekday from 6:30 PM to 7:30 PM ET and Friday 6:30 PM ET through Sunday 5:00 PM ET.



**Rule 1388. ~~Reserved~~ Singapore Gasoil 10 ppm Swap**

**Contract Description:** A monthly cash settled swap based on the Platts daily assessment price for Singapore Gasoil 10 ppm.

**Contract Symbol:** GST

**Contract Size:** 1,000 barrels

**Unit of Trading:** Any multiple of 1,000 barrels

**Currency:** US Dollars and cents

**Trading Price Quotation:** One cent (\$0.01) per barrel

**Last Trading Day:** Last Trading Day of the contract month

**Final Settlement Price:** In respect of final settlement, the Floating Price will be a price in USD and cents per barrel based on the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil 10 ppm” for each business day (as specified below) in the determination period.

**Roll Adjust Provision:** N/A

**Contract Series:** Up to 60 consecutive months, or as otherwise determined by the SEF

**Final Payment Dates:** Fourteen (14) Calendar Days after each settlement date via wire transfer or Federal funds

**Business Days:** Publication days for Platts Asia-Pacific/Arab Gulf Marketscan

**Other Terms:** To be confirmed directly between the parties in their full form of contract. The terms reflected in such contracts shall be controlling.





**Rule 1389. ~~Reserved~~ Singapore Gasoil 10 ppm Balmo Swap**

**Contract Description:** A balance of the month cash settled swap based on the Platts daily assessment price for Singapore Gasoil 10 ppm.

**Contract Symbol:** GSS

**Contract Size:** 1,000 barrels

**Unit of Trading:** Any multiple of 1,000 barrels

**Currency:** US Dollars and cents

**Trading Price Quotation:** One cent (\$0.01) per barrel

**Last Trading Day:** Last Trading Day of the contract month

**Final Settlement Price:** In respect of final settlement, the Floating Price will be a price in USD and cents per barrel based on the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil 10 ppm” for each business day (as specified below) in the determination period.

**Roll Adjust Provision:** N/A

**Contract Series:** Up to 2 consecutive months, or as otherwise determined by the SEF

**Final Payment Dates:** Fourteen (14) Calendar Days after each settlement date via wire transfer or Federal funds

**Business Days:** Publication days for Platts Asia-Pacific/Arab Gulf Marketscan

**Other Terms:** To be confirmed directly between the parties in their full form of contract. The terms reflected in such contracts shall be controlling.

**Rule 1390. Reserved** Singapore Gasoil 10 ppm Swap vs Singapore Gasoil Swap

**Contract Description:** A monthly cash settled swap based on the difference between the Platts daily assessment price for Singapore Gasoil 10 ppm and Platts daily assessment price for Singapore Gasoil.

**Contract Symbol:** GSW

**Contract Size:** 1,000 barrels

**Unit of Trading:** Any multiple of 1,000 barrels

**Currency:** US Dollars and cents

**Trading Price Quotation:** One cent (\$0.01) per barrel

**Last Trading Day:** Last Trading Day of the contract month

**Final Settlement Price:** In respect of final settlement, the Floating Price will be a price in USD and cents per barrel based on difference between the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil 10 ppm” and the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil” for each business day (as specified below) in the determination period.

**Roll Adjust Provision:** N/A

**Contract Series:** Up to 60 consecutive months, or as otherwise determined by the SEF

**Final Payment Dates:** Fourteen (14) Calendar Days after each settlement date via wire transfer or Federal funds

**Business Days:** Publication days for Platts Asia-Pacific/Arab Gulf Marketscan

**Other Terms:** To be confirmed directly between the parties in their full form of contract. The terms reflected in such contracts shall be controlling.



**Rule 1391. Reserved Singapore Gasoil 10 ppm Swap vs Singapore Gasoil Balmo Swap**

**Contract Description:** A balance of the month cash settled swap based on the difference between the Platts daily assessment price for Singapore Gasoil 10 ppm and Platts daily assessment price for Singapore Gasoil.

**Contract Symbol:** N/A

**Contract Size:** 1,000 barrels

**Unit of Trading:** Any multiple of 1,000 barrels

**Currency:** US Dollars and cents

**Trading Price Quotation:** One cent (\$0.01) per barrel

**Last Trading Day:** Last Trading Day of the contract month

**Final Settlement Price:** In respect of final settlement, the Floating Price will be a price in USD and cents per barrel based on difference between the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil 10 ppm” and the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil” for each business day (as specified below) in the determination period.

**Roll Adjust Provision:** N/A

**Contract Series:** Up to 2 consecutive months, or as otherwise determined by the SEF

**Final Payment Dates:** Fourteen (14) Calendar Days after each settlement date via wire transfer or Federal funds

**Business Days:** Publication days for Platts Asia-Pacific/Arab Gulf Marketscan

**Other Terms:** To be confirmed directly between the parties in their full form of contract. The terms reflected in such contracts shall be controlling.



**Rule 1392. ~~Reserved~~ Singapore Jet Kero vs Singapore 10 ppm Gasoil Swap**

**Contract Description:** A monthly cash settled swap based on the difference between the Platts daily assessment price for Singapore Jet Kerosene and Platts daily assessment price for Singapore Gasoil.

Platts assessment of Singapore "Gasoil" from January 2, 2018 will reflect 10 ppm sulfur Gasoil grade.

**Contract Symbol:** BAQ

**Contract Size:** 1,000 barrels

**Unit of Trading:** Any multiple of 1,000 barrels

**Currency:** US Dollars and cents

**Trading Price Quotation:** One cent (\$0.01) per barrel

**Last Trading Day:** Last Trading Day of the contract month

**Final Settlement Price:** In respect of final settlement, the Floating Price will be a price in USD and cents per barrel based on difference between the average of the "Mid" quotations appearing in "Platts Asia-Pacific/Arab Gulf Marketscan" under the heading "Asia Products" subheading "Singapore" and "FOB Singapore (\$/barrel)" for "Kerosene" and the average of the "Mid" quotations appearing in the "Platts Asia-Pacific/Arab Gulf Marketscan" under the heading "Asia Products" subheading "Singapore" and "FOB Singapore (\$/barrel)" for "Gasoil 10 ppm" for each business day (as specified below) in the determination period.

**Roll Adjust Provision:** N/A

**Contract Series:** Up to 60 consecutive months, or as otherwise determined by the SEF

**Final Payment Dates:** Fourteen (14) Calendar Days after each settlement date via wire transfer or Federal funds

**Business Days:** Publication days for Platts Asia-Pacific/Arab Gulf Marketscan

**Other Terms:** To be confirmed directly between the parties in their full form of contract. The terms reflected in such contracts shall be controlling.



**Rule 1393. ~~Reserved~~ Singapore Jet Kero vs Singapore 10 ppm Gasoil Balmo Swap**

**Contract Description:** A balance of the month cash settled swap based on the difference between the Platts daily assessment price for Singapore Jet Kerosene and Platts daily assessment price for Singapore Gasoil 10 ppm.

Platts assessment of Singapore “Gasoil” from January 2, 2018 will reflect 10 ppm sulfur Gasoil grade.

**Contract Symbol:** BAT

**Contract Size:** 1,000 barrels

**Unit of Trading:** Any multiple of 1,000 barrels

**Currency:** US Dollars and cents

**Trading Price Quotation:** One cent (\$0.01) per barrel

**Last Trading Day:** Last Trading Day of the contract month

**Final Settlement Price:** In respect of final settlement, the Floating Price will be a price in USD and cents per barrel based on difference between the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Kerosene” and the average of the “Mid” quotations appearing in the “Platts Asia-Pacific/Arab Gulf Marketscan” under the heading “Singapore” subheading “FOB Singapore (\$/barrel)” for “Gasoil 10 ppm” for each business day (as specified below) in the determination period.

**Roll Adjust Provision:** N/A

**Contract Series:** Up to 2 consecutive months, or as otherwise determined by the SEF

**Final Payment Dates:** Fourteen (14) Calendar Days after each settlement date via wire transfer or Federal funds

**Business Days:** Publication days for Platts Asia-Pacific/Arab Gulf Marketscan

**Other Terms:** To be confirmed directly between the parties in their full form of contract. The terms reflected in such contracts shall be controlling.

## Exhibit B

### **A. Middle Distillates Overview**

The global middle distillate market, composed of related but individual markets for various grades of heating oil, diesel transport fuel on road, or for maritime use, jet and other gasoils has evolved over time, with ICE Low Sulphur Gasoil Futures in Europe as the largest single liquidity source, complemented by US Heating Oil Futures, Singapore Gasoil, and a host of related differential basis contracts around such primary outright price instruments (see Figure 1).

The financial Low Sulphur Gasoil market is one of the largest financial oil markets which has been well established since the late 1980's with liquidity growth enabling the efficient pricing and trading of the market through highly volatile periods such as the Gulf Wars in Iraq in the early 1990's and in 2001. The Oil industry has standardized the financial Contracts that enable effective price risk management for the underlying global physical Gasoil market, the relationship between different qualities, locations and also the relationship between Gasoil and the Brent Crude oil market used by refineries to make petroleum products, i.e. the refinery profit margin also known as the crack spread. These match the key flows of physical Gasoil around the world and already serve the needs of the industry.

The most commonly used series of physical pricing indices for middle distillate markets is published by Platts, with market pricing focused for liquidity purposes on a number of key geographical physical trading hubs, Gasoil qualities, and size of delivery quantity i.e. a large cargo ship or a smaller barge type vessel. Other grades and regional markets then trade and price as differentials off these key pricing hubs. The use of cash-settled swaps in particular allows any physical term Contract which are frequently written on a calendar monthly average floating basis against a Platts physical spot price index to effectively be re-fixed with a financial swap.

The key pricing hubs are Mediterranean (MED), Northwest Europe (NWE), Rotterdam (RDAM), New York Harbor (NYH), United States Gulf Coast (USGC), and Singapore. Depending on the spread between different physical locations, the arbitrage spread, physical Gasoil can be observed to move between Northwest Europe – Mediterranean, Mediterranean and Middle East, Europe and Asia, and USA to Europe and vice versa. These movements of physical Gasoil are in large quantities onboard Cargo size vessels and are represented by the Cargo swaps.

Increasingly large quantities of ULSD (Ultra-Low Sulphur Diesel) are moving from the US to Europe, and from Asia also to Europe, pricing on an outward basis from local pricing bases in Singapore or the US Gulf/New York Harbour, or on arrival, often with a differential quality basis on top, provided by a differential swap on top of the ICE Low Sulphur Gasoil basis Future. Physical spot distillate markets trade on a price basis of: ICE Low Sulphur Gasoil plus differential for quality and location; so do the derivatives for reliable convergence between the two. Depending on the exact quality of the eventual oil, between 85% (CIF NWE Jet cargoes) and 99.8% (0.1% Gasoil barges) of the total outright price basis will be covered by the core Futures basis, which is the bedrock of price discovery and efficient trading in the European distillate market, and by extension as an importing zone beyond that to global distillate markets.

In general, lower sulphur content has been mandated across global markets either directly or through imposition of carbon costs, which has seen a steady fall in the sulphur content of the typical Gasoil specification in use from one of 5000 parts per million (ppm) in 1983, to that of just 10ppm.

The global Gasoil (Diesel) market is a very liquid and well established physical market providing fuel for end users in the Marine and Road transportation industry, Power Generation, and as a fuel for home heating oil. It represents about a third of the production output from crude oil refineries around the world, and the largest sector within global distillates markets.

Balance Month or 'Balmo' swaps, which take an assessor's price from the day of trade to the end of that calendar month, rather than an entire calendar month allow the very precise hedging of physical prices, and thus allow perfect hedges to be constructed where the physical price exposed to is exactly matched by the tenor of the swap and the related physical index.

Middle distillate are available as a basis in both cargo size and barges size (typically barges are of 2,000-4,000 metric tonnes in Europe, but typically only cargoes in Singapore, and again both types in the US (barges in New York Harbor). Cargoes of 10,000 metric tonnes and upward or 50,000 bbls in the US or Asia are typical with larger arbitrage vessels of up to 70,000 metric tonnes are in use to leverage differential pricing where or when it occurs with differing economic or refining conditions in different geographies. In Europe, swaps trade both in the Rotterdam barge basis, a Northwest Europe Cargo (Le Havre basis), and in the Mediterranean on an ex-Genova/Lavera port basis. In each case, the swap is entirely aligned with a physical spot assessment appearing within the Platts European Marketscan publication.

Middle distillate markets, in common with other refined product markets are also often traded as 'cracks' to a chosen crude basis, frequently that of Brent, in addition to a differential to flat price Low Sulphur Gasoil. The multiplicity of spread price matrices assists price discovery and helps to triangulate value across multiple arbitrageable prices, whether by product quality e.g. Jet to Gasoil, or diesel to gasoil, or by spread to outright, for example by comparison to a crack value. Each of these ensures that value is tested against multiple liquidity pools and also assist by 'lending' liquidity from the most liquid instruments to less liquid markets, which might otherwise have less liquidity, were they to be reliant on flat price-only market indications.

In Singapore-based Asian spot and swap markets, the small number of alternative physical bases (relative to Europe, for example), and cargo-sized clips have allowed liquid trade in a very standardized outright price market, and this supplied sufficient liquidity for that market to function efficiently for trading purposes without an underlying local Futures market. Platts assessments are the most commonly used basis for physical spot assessments and the pricing basis for related swaps, allowing full alignment of term Contract pricing and hedging with swaps where required. The Singapore 0.05% Gasoil and the upcoming 10ppm Gasoil grade which will take over in 2018 are the respective core benchmarks there.

Published assessments of the physical middle distillate markets market by Platts represent assessments of the trade in barges or cargoes in the periods between 3 and 15 days ahead for barges, and 10-25 days for cargoes (15-30 days in Asia); cargoes in Asia being further forward in time to reflect the typically longer sailing times in that region. European barges are quoted FOB (Free on Board) i.e. a lifting rather than a delivered price inclusive of freight; with cargoes' most liquid assessments reflecting FOB in Asia, but CIF (Cost including Insurance and Freight) as a delivered Contract in Europe. US cargoes also

typically reflect FOB for vessels, although the US as a pipeline-dominated region will typically reflect FOB vessels where applied to vessels out of either the New York Harbor or US Gulf markets.

Jet is a global market, in each region following the typical middle distillate pattern. Singapore liquid middle distillates include Jet as a 'regrade' or differential to base Singapore Gasoil or as an outright; whilst in Europe this differential is expressed as a differential or spread to Low Sulphur Gasoil, or as a crack to crude. Jet is a highly internationally-traded and relatively homogenized refined product like its sister diesel grade, which share a lighter density than some other gasoils, and is readily arbitrated for what is a highly competitive aviation fuel market, composing often 25% or more of airline costs. Jet fuel pricing may be built up through layers of basis, allowing Jet to be priced as a gasoil crack to crude, sometimes then with a Jet differential or regrade to the core gasoil base on top. The different components are traded on an opportunistic basis to allow airlines to attempt to optimize their eventual fuel cost, and which also makes the varying component of the total readily arbitrated against each other within the outright Jet price. Thus the final price can be hedged in one go or via a series of stages. The multiple avenues to a final price enable competition across the markets with their various counterparties and arbitrage to work against any pricing anomaly that might otherwise occur. This 'slicing' or 'layering' of outright price basis is a feature of many global oil markets.

## II. Underlying Cash Market For Listed Swaps

The Methodology and Specifications Guide for Asian refined oil assessments is contained here:

<http://www.platts.com/IM.Platts.Content/MethodologyReferences/MethodologySpecs/Asia-refined-oil-products-methodology.pdf>

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1393	Singapore Jet Kero vs Singapore 10 ppm Gasoil Balmo Swap

Singapore Gasoil 10 ppm Swap and the Singapore Gasoil 10 ppm Swap vs Singapore Gasoil Swap: The Singapore Gasoil 10 ppm assessment by Platts 'reflect a minimum of 150,000 barrels, maximum 250,000 barrels, loading 15-30 days from the date of publication' according to their methodology. This is the same as the benchmark Gasoil 500 ppm assessment. The primary difference between the two assessments is the sulphur content; the Gasoil 10 ppm only contains 10 parts per million (ppm) of sulphur and therefore is very similar to an Ultra-Low Sulphur Diesel (ULSD) specification.

Upon analysis of the Platts Market on Close process, activity in the 10 ppm Gasoil market is increasing and will continue to do so as the Platts Singapore Gasoil benchmark shifts from 500 ppm to 10 ppm at the start of 2018. In Q1 2017, 115 outstanding bids, 155 outstanding offers and 29 trades were observed between fifteen market participants. ICE Futures Europe has available for trading the Singapore Gasoil



10 ppm (Platts) Future and open interest at the end of March 2017 was 1,002 lots, while the differential contract Singapore Gasoil 10 ppm vs Singapore Gasoil (Platts) Future had 25,003 lots.

Singapore Jet Kero vs Singapore 10 ppm Gasoil Swap: Jet Fuel, as a type of middle distillate, is closely related to gasoil and typically trades on a spot basis as a differential to the more liquid gasoil benchmark (in Asia this is Singapore Gasoil, while in Europe an equivalent would be Jet CIF NWE Cargoes (Platts) versus ICE Low Sulphur Gasoil Swap). These derivative contracts will allow Asian refiners to hedge the difference between the two outright values on a full month and balance of the month basis.

Platts sees bids and offers in the Market on Close process every day for Singapore Jet Kerosene cargoes, delivered 15-30 days ahead of the assessment day. In Q1 2017, cargoes between 100,000-250,000 barrels in size have been traded by seventeen participants resulting in 45 trades. The assessment process is supported by 84 bids and 354 offers in the same time period. The existing Singapore Jet Kerosene Cargoes (Platts) vs Singapore Gasoil (Platts) Future at ICE Futures Europe had 82,579 lots of open interest at the end of Q1 2017.