

SUBMISSION COVER SHEET

IMPORTANT: Check box if Confidential Treatment is requested

Registered Entity Identifier Code (optional): 17-148

Organization: New York Mercantile Exchange, Inc. ("NYMEX")

Filing as a: DCM SEF DCO SDR

Please note - only ONE choice allowed.

Filing Date (mm/dd/yy): 05/18/17 **Filing Description:** Initial Listing of Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures Contract

SPECIFY FILING TYPE

Please note only ONE choice allowed per Submission.

Organization Rules and Rule Amendments

- | | | |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Notification | § 40.6(d) |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change | § 40.10(h) |

Rule Numbers:

New Product

Please note only ONE product per Submission.

- | | | |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification | § 40.2(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.23(a) |
| <input type="checkbox"/> | Certification Swap Class | § 40.2(d) |
| <input type="checkbox"/> | Approval | § 40.3(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.23(b) |
| <input type="checkbox"/> | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/> | Swap Submission | § 39.5 |

Product Terms and Conditions (product related Rules and Rule Amendments)

- | | | |
|--------------------------|---|----------------------|
| <input type="checkbox"/> | Certification | § 40.6(a) |
| <input type="checkbox"/> | Certification Made Available to Trade Determination | § 40.6(a) |
| <input type="checkbox"/> | Certification Security Futures | § 41.24(a) |
| <input type="checkbox"/> | Delisting (No Open Interest) | § 40.6(a) |
| <input type="checkbox"/> | Approval | § 40.5(a) |
| <input type="checkbox"/> | Approval Made Available to Trade Determination | § 40.5(a) |
| <input type="checkbox"/> | Approval Security Futures | § 41.24(c) |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | “Non-Material Agricultural Rule Change” | § 40.4(b)(5) |
| <input type="checkbox"/> | Notification | § 40.6(d) |

Official Name(s) of Product(s) Affected:

Rule Numbers:



Christopher Bowen
Managing Director and Chief Regulatory Counsel
Legal Department

May 18, 2017

VIA ELECTRONIC PORTAL

Mr. Christopher J. Kirkpatrick
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20581

Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of the Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures Contract. NYMEX Submission No. 17-148

Dear Mr. Kirkpatrick:

New York Mercantile Exchange, Inc. (“NYMEX” or “Exchange”) is notifying the Commodity Futures Trading Commission (“CFTC” or “Commission”) that it is self-certifying the initial listing of the Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures contract (the “Contract”) for trading on CME Globex and for submission for clearing via CME ClearPort, effective Sunday, June 4, 2017 for trade date Monday, June 5, 2017, as set forth below.

Contract Title	Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures
Commodity Code	BDB
Rulebook Chapter	1087
Settlement Method	Financial
Contract Size	1,000 barrels
Listing Schedule: CME Globex and CME ClearPort	Monthly contracts listed for 3 consecutive months.
Minimum Price Fluctuation CME Globex and CME ClearPort	\$0.001 per barrel. Daily settlement prices and the final settlement price shall have a minimum price fluctuation of \$0.001 per barrel.
Value per Tick	\$1.00
First Listed Month	June 2017
Block Trade Minimum Threshold	10 contracts
Termination of Trading	Last business day of the contract month.

CME Globex Matching Algorithm	First In First Out (FIFO)
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Trading and Clearing Hours:

CME Globex and CME ClearPort	Sunday - Friday 6:00 p.m. - 5:00 p.m. (5:00 p.m. - 4:00 p.m. Central Time/CT) with a 60-minute break each day beginning at 5:00 p.m. (4:00 p.m. CT)
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Fees:

	Member	Non-Member	International Incentive Programs (IIP/IVIP)
Exchange Fees			
CME Globex	\$0.85	\$1.25	\$1.05
EFP	\$0.85	\$1.25	
Block	\$0.85	\$1.25	
EFR/EOO	\$0.85	\$1.25	
Agency Cross	\$0.85	\$1.25	

Processing Fees	Member	Non-Member
Cash Settlement	\$0.10	\$0.10
Other Fees		
Facilitation Fee		\$0.60
Give-Up Surcharge		\$0.05
Position Adjustment/Transfer		\$0.10

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the Contract into the Position Limit, Position Accountability and Reportable Level Table and Header Notes located in the Interpretations and Special Notices Section of Chapter 5 of the NYMEX Rulebook in relation to the listing of the new contract. The terms and conditions establish the all month/any one month accountability levels, expiration month position limit, reportable level, and aggregation allocation for the new contract. Please see Appendix B, attached under separate cover.

NYMEX is also notifying the CFTC that it is self-certifying block trading on the Contract with a block trade minimum threshold level of 10 contracts which is aligned with the Exchange's similar crude oil futures contracts.

The Exchange reviewed the designated contracts market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA" or "Act") and identified that the Contract may have some bearing on the following Core Principles:

Compliance with Rules: Trading in the Contract will be subject to all NYMEX Rules, including prohibitions against fraudulent, noncompetitive, unfair and abusive practices as outlined in NYMEX Rule Chapter 4, the Exchange's trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the NYMEX Rulebook, and the dispute resolution and arbitration procedures of NYMEX Rule Chapter 6. As with all products listed for trading on one of CME Group's designated contract markets, trading activity in the Contract will be subject to monitoring and surveillance by CME Group's Market Regulation Department.

The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

Contract Not Readily Subject to Manipulation: The Contract is not readily subject to manipulation as a result of the deep liquidity and robustness of the underlying cash and futures market and the settlement index. Pursuant to the Exchange's obligations under this core principle, the final settlement indices are published by Platts and sub-licensed to the Exchange.

Prevention of Market Disruption: Trading in the Contract will be subject to the Rules of the Exchange, which include prohibitions on manipulation, price distortion, and disruption to the cash settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the futures contracts proposed herein will be subject to monitoring and surveillance by CME Group's Market Regulation Department.

Position Limitations or Accountability: The speculative position limits for the Contract as demonstrated in this submission are consistent with the Commission's guidance.

Availability of General Information: The Exchange will publish on its website information in regard to contract specifications, terms, and conditions, as well as daily trading volume, open interest, and price information for the Contract.

Daily Publication of Trading Information: The Exchange will publish contract trading volumes, open interest levels, and price information daily on its website and through quote vendors for the Contract.

Execution of Transactions: The Contract will be listed for trading on the CME Globex electronic trading platform and for clearing through the CME ClearPort platform. The CME Globex trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity. The CME ClearPort platform provides a competitive, open and efficient mechanism for novating transactions that are competitively executed by brokers.

Trade Information: All requisite trade information for the Contract will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.

Financial Integrity of Contract: The Contract will be cleared by the CME Clearing House, a derivatives clearing organization registered with the Commodity Futures Trading Commission and subject to all CFTC regulations related thereto.

Protection of Market Participants: NYMEX Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.

Disciplinary Procedures: Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in this contract will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in this product is identified.

Dispute Resolution: Disputes with respect to trading in the Contract will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all non-members to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulations 40.2(a), the Exchange hereby certifies that listing the Contract complies with the Act, including regulations under the Act. There were no substantive opposing views to the proposal by market participants.

The Exchange certifies that this submission has been concurrently posted on the CME Group website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or via e-mail at CMEGSubmissionInquiry@cmegroup.com.

Sincerely,

/s/ Christopher Bowen
Managing Director and Chief Regulatory Counsel

Attachments: Appendix A: NYMEX Rulebook Chapter
Appendix B: Position Limits, Position Accountability and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover)
Appendix C: NYMEX Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table
Appendix D: Cash Market Overview and Analysis of Deliverable Supply

Appendix A

NYMEX Rulebook

Chapter 1087

Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures

1087100. SCOPE

The provisions of these rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

1087101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is the Balance of Month arithmetic average of the Brent Crude Oil (ICE) Futures first nearby contract settlement price minus the mid-point between the high and low quotations from Platts Crude Oil Marketwire for the Dubai front month price for each business day during the contract month (using non-common pricing), except as noted below.

The settlement price of the first nearby contract month will be used except on the last day of trading for the expiring Brent Crude Oil Penultimate Financial Futures contract when the settlement price of the second nearby Brent Futures contract will be used.

1087102. TRADING SPECIFICATIONS

The number of months open for trading at a given time shall be determined by the Exchange.

1087102.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

1087102.B. Trading Unit

The contract quantity shall be 1,000 U.S. barrels. Each contract shall be valued as the contract quantity (1,000) multiplied by the settlement price.

1087102.B. Price Increments

Prices shall be quoted in USD and cents per barrel. The minimum price fluctuation shall be USD 0.001 per barrel. There shall be no maximum price fluctuation.

1087102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

1087102.E. Termination of Trading

Trading shall cease on the last business day of the contract month.

1087103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

1087104. DISCLAIMER

S&P Global Platts, a division of S&P Global Inc. ("Platts"), licenses New York Mercantile Exchange, Inc. ("NYMEX") to use various Platts price assessments in connection with the trading or posting of the contracts.

NEITHER NYMEX, ITS AFFILIATES, NOR PLATTS GUARANTEES THE ACCURACY AND/OR COMPLETENESS OF THE INDEX OR ANY OF THE DATA INCLUDED THEREIN.

NYMEX; ITS AFFILIATES AND PLATTS MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY ANY PERSON OR ENTITY FROM USE OF THE ASSESSMENT, TRADING BASED ON THE ASSESSMENT, OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE TRADING OF THE CONTRACTS, OR, FOR ANY OTHER USE. NYMEX, ITS AFFILIATES AND PLATTS MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL COMEX, ITS AFFILIATES OR PLATTS HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGE.

Appendix B

**Position Limits, Position Accountability and Reportable Level Table
in Chapter 5 of the NYMEX Rulebook**

(attached under separate cover)

Appendix C

NYMEX Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table

(additions are underscored)

Instrument Name	Globex Symbol	Globex Non-Reviewable Ranges (NRR)	NRR: Globex Format	NRR: Ticks
<u>Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures</u>	<u>BDB</u>	<u>\$1.00 per barrel</u>	<u>1000</u>	<u>1000</u>

Appendix D

Cash Market Overview

Data Sources:

Data provided by **Bloomberg** was used as the basis of the analysis for the Brent market. They compile the total loaded volumes of BFOE (Brent, Forties, Oseberg and Ekofisk) by month. These four grades are the crude streams that underpin the Dated Brent complex and are the underlying components for the cash Brent or BFOE market. This data is publicly available via the Bloomberg terminal.

Data provided by the **Joint Organisations Data Initiative Oil (JODI-Oil)**¹ is an amalgamation of a number of data sources across the globe including Eurostat, the International Energy Agency, OPEC and the United Nations. The number of participating organisations is 8 but its representation is global. JODI was launched in 2001 and they provide data for oil and natural gas markets from over 100 countries. The data contained on their website goes back to 2002 and like other data sources they provide a range of information covering Energy Production, Consumption, Stocks, Demand, Imports, Exports and Prices and prepares ad-hoc special reports on topics of interest on a periodic basis.

Data provided for the Forties crude oil stream and the % content of Buzzard crude in the Blend is provided by the **Forties Pipeline system**². This data is given on a forward basis based on the data that is provided by the different field operators in the system to BP (who are the current operator) of the Forties field.

The North Sea Market

The North Sea market is comprised of the oil fields in the UK and Norwegian North Sea. There is a series of smaller oil fields which connect into larger streams. The most important streams in the North Sea are Brent, Forties, Oseberg and Ekofisk and each stream has a principle operator that is responsible for the day to the day control of the operations including the scheduling of the cargoes based on the production from each of the smaller producing fields. The Brent, Forties, Oseberg and Ekofisk fields are known as BFOE and they underpin the Brent complex and are the key grades of oil that make up the trading of Dated Brent – the international crude oil physical benchmark price. The four BFOE fields lie in the North Sea. Brent and Forties are in the UK sector, whilst Ekofisk and Oseberg are in the Norwegian sector. A new addition, Troll, will be added to the BFOE basket of crudes from January 2018. This is a light sweet crude oil but it is also relatively acidic in quality.

The core of the Brent market is the cash market. The Brent forward market currently consists of the trading of cargoes of any of the Brent, Forties, Oseberg and Ekofisk streams for delivery beyond month ahead, with no specific dates assigned for loading. From January 2018, Norwegian Troll will be added to the BFOE streams that are tradable. Cargoes are bought and sold in quantities of 600,000 barrels which is a standard loading size for the main North Sea streams. The nomination window for cargoes is 10 days to month ahead which means cargoes are nominated by the seller to the buyer within this period. The Brent cash market is essentially a reseller market where buyers either: resell the oil to someone else; transport the cargo and resell it later; or transport the cargo to consume it. Most of the sales in the Brent market are conducted as spot-market transactions; in fact, Brent cargoes in the physical market are estimated to trade 10 or more times. Typically, there is a chronology of sales and purchases of crude oil in the Brent cash market that starts with a sale from the equity producer in a spot market transaction, and finishes with a purchase by an end-user to consume the crude oil. Equity producers typically utilize the robust spot market to sell their BFOE production at the cargo loading terminal, as a “Free on Board” (FOB) delivery. Traders play an active role in the Brent market as middlemen with the expressed responsibility of reselling the oil. Further, the refiners typically rely on the spot market to purchase Brent crude oil, because there is vibrant liquidity in the

¹ JODI Database - <https://www.jodidata.org/>

² BP - http://www.bp.com/en/global/forties-pipeline/about_fps/forties_blend_quality.html

spot market, and hence, the refiners have developed a preference for short-term spot market purchases, rather than long-term contracts. This applies to refiners affiliated with equity producers as well as those not affiliated; this is the standard practice, established and institutionalized over the past 34 years.

Production of the four grades within BFOE have been declining over the past few years due to the cost of drilling and the returns on investment compared to other regions in the world. For this reason, Platts have evaluated the addition of new grades into the cash market and are adding Troll with effect from January 2018. Further grades within the North Sea or beyond maybe added over time, but this will be closely monitored by Platts over the next year or so to see how overall output levels evolve.

After the seller of a BFOE contract notifies the buyer as to the loading date and which stream is being loaded, the contract is now considered to have moved from the forward market to the Dated Brent market, historically this moment is referred to as the cargo going “wet” i.e. it has loading dates attached to it and can therefore be sold as a Dated Brent cargo.

The process of moving from a forward to the physical market where a forward Brent cargo becomes a physical North Sea Dated Brent cargo happens as follows:

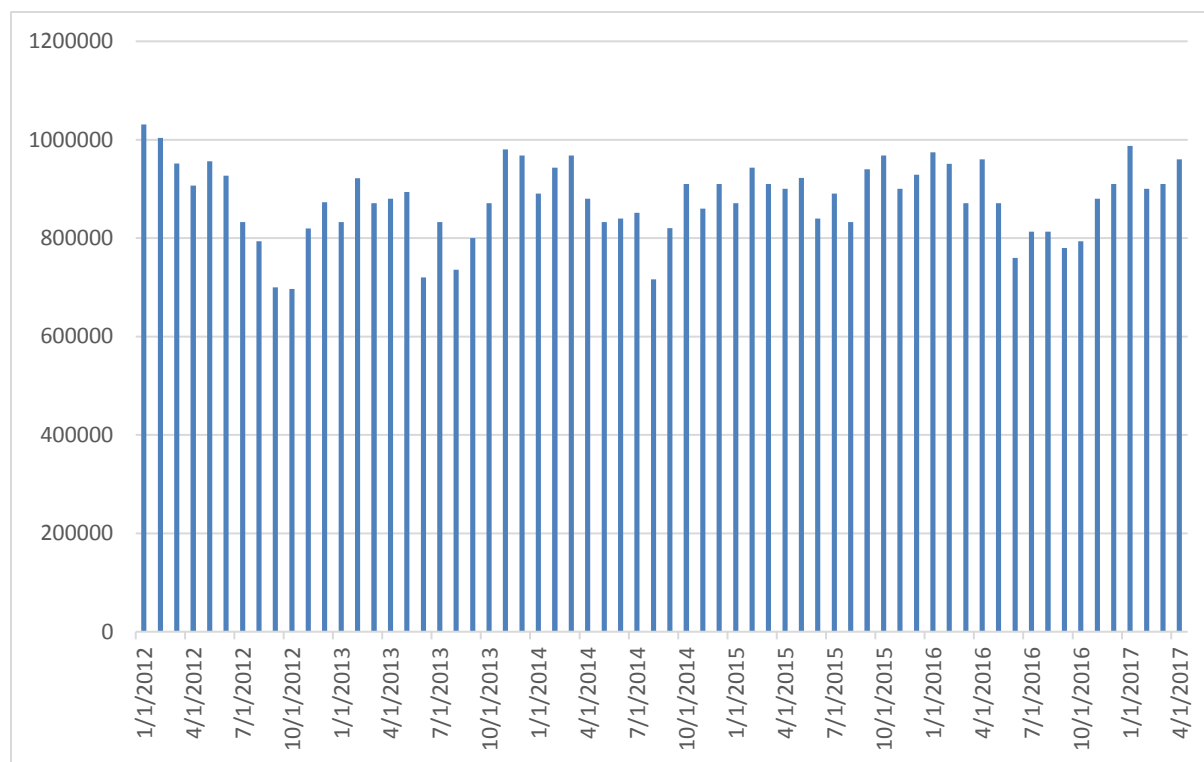
1. Refiners, producers and traders enter into a forward agreement for a particular month.
2. The Operator of each field being Shell for Brent; BP for Forties; ConocoPhillips for Oseberg and Statoil for Ekofisk will announce the loading programs for each contract month a few days prior to the beginning of the month (one month prior) to each loading month (i.e. cargoes in the delivery month start to load). Statoil will also be the main operator of the Troll field and therefore will play a significant role in Ekofisk and Troll. For example, for a June 2016 contract month, the field operators will announce the loading schedules a few days prior to the beginning of April 2016. The equity producers will begin the chain of nominating cargoes to buyers (or they can decide to keep the cargo). A buyer benefiting from a nomination can keep the cargo or pass it to another player with whom it has another forward contract. Buyers trade the cash BFOE on the basis that they will accept any cargo as nominated provided that it is done so within the agreed notice period (10 days to month ahead) by 4pm London time. Any cargo not nominated by this time will remain with the participant last notified. After 4pm London time, the cargo becomes wet physical with precise loading dates attached.
3. Cargoes that are wet physical will be sold as a Dated Brent cargo with cargo loading dates between 10 days and month ahead.

Chart 1 shows the makeup of the fields in the Forties pipeline system (FPS) which is operated by BP. Effective March 2017, BP confirmed that it is in discussions with INEOS regarding the potential sale of the pipeline³. There are over 50 offshore fields that flow through within the FPS. The delivery point for Forties crude oil is Hound Point, which is on the East coast of Scotland a short distance from the UK oil capital Aberdeen. Forties is a blended crude oil from all of the fields that feed into it.

³ BBC news – BP sells the Forties pipeline <http://www.bbc.co.uk/news/uk-scotland-scotland-business-39303392>

Bloomberg LP (“Bloomberg”) provides details of the BFOE loading programs for the four grades that comprise the Brent market. Based on the most recent 3-year average of the Bloomberg data on BFOE loadings (from May 2014 to March 2017), the total loadings of Brent (BFOE) crude oil was approximately 881,039 barrels per day, which is equivalent to approximately 26.43 million barrels per month (see Exhibit A for full data breakdown). The Bloomberg data, in Chart 2, shows the volume of crude oil for Brent, Forties, Oseberg and Ekofisk (collectively known as BFOE). The month on month data set by Bloomberg is shown in Exhibit A. Loaded volumes of BFOE appear to have stabilized since 2015, but the effects of the low oil price environment have prompted the biggest international upstream operators to evaluate their continued full presence in the North Sea. BP, which operates the Forties Pipeline System (FPS) announced in March 2017⁵ that it was in discussion with Ineos to sell the Pipeline system. Ineos operates the Grangemouth refinery into which the Forties pipeline system flows (via the Cruden Bay terminal on the East Coast of Scotland).

Chart 2: Monthly Loadings of Brent, Forties, Oseberg, Ekofisk



The Brent market is priced in USD and cents per barrel. There are two significant Futures contracts based on trading activity in the forward BFOE market; NYMEX and ICE Futures Europe offer trading of Brent Futures on their respective Exchanges. The cash market is traded in partials of 100,000 barrels or larger full size cargo transactions of 600,000 barrels. Physical convergence from the cash or partials market to the physical market upon the trading of six 100,000 barrel parcels (or equivalent) with the same counterparty in a single delivery month. If physical convergence fails to occur trades are booked out at the prevailing cash value on the last day of trading day of the cash market for the specific delivery month (i.e. on a month ahead basis prior to the 1st of the delivery month). As the Futures market expiry mechanism (the Brent Index) is based on cargo transactions, only 600,000 cash BFOE trades are taken into

⁵ BP Forties pipeline sale <http://www.telegraph.co.uk/business/2017/03/16/bp-talks-ineos-sell-north-seas-largest-pipeline/>

consideration for the calculation of the index price. All open futures positions on the exchange are cash settled against the Index price on the last trading day. The NYMEX contract is a look-a-like reference contract for the Brent market. A full methodology guide is available on the ICE website⁶. The Brent Index is one of the 8 regulated benchmarks specified in legislation by the UK Treasury (effective April 2015)⁷. As a result, ICE established an oversight committee comprising of industry experts, representation from an Oil Price Reporting Agency as well as Exchange staff and non-executive directors. Their scope is to oversee the administration of the index including employing scrutiny over the benchmark submissions. Full details of the Index committee and its work can be found here⁸. The Committee also publish look-back statistics on the trading patterns of the index.

The Dated Brent or Dated BFOE, as it is sometimes referred, reflects the value of the cheapest of Brent, Forties, Oseberg and Ekofisk, of 600,000 barrels, loading 10 days to Month Ahead. The value of Dated Brent is estimated to price around 50% of the global crude oil supply⁹. Within the North Sea and beyond, grades are traded as a differential to Dated Brent or as a differential to cash Brent (BFOE). Each of the crude oil grades within BFOE are not the same quality, several adjustments have been made. In 2007 Platts included a sulphur de-escalator for Forties crude oil within its Dated Brent and Brent related instruments. The change was made in response to inclusion of sour crude Buzzard into the Forties pipeline system (see chart 1). The de-escalator of price is applied to deliveries above a minimum sulphur level of 0.6%. Every month, Platts establishes a USD and cents value de-escalator for every 0.1% of sulphur above the maximum level 0.6% (for Forties crude oil). The value of de-escalator is established by reviewing evidence of significant and sustained changes in the crude market, as affected by refined products (crack spread values of both heavy fuel oils and light ends) and other relevant factors that affect the economics of Forties crude.

Dubai, Oman, Upper Zakum and Al-Shaheen Crude Oil

The third of the large crude oil benchmarks is Dubai and incorporates supply from the Middle East. Specifically, it includes the delivery of several crude streams from the United Arab Emirates, Oman and Qatar as the crudes from these countries can be traded in the spot market.

The specific grades, which underpin the Platts Dubai assessment are Dubai itself, Oman, Upper Zakum. Effective January 2016, Platts also added Murban and Al-Shaheen as alternative crudes that can be delivered its Dubai and Oman benchmarks. The Al-Shaheen can be delivered as an alternative into the Dubai benchmark whereas Murban can be delivered as an alternative crude oil to Oman. Due to the quality variance within the basket of crudes, Platts also added a Quality Premium to compensate the seller for Murban crude (due to its higher quality). The producers use the price of Dubai (and Oman) crude oil in their Official Selling Prices for long-term contracts and for Asian customers, the Official Selling Price is a split between Platts Dubai and Platts Oman crude oil. There is an active Futures and OTC market in Dubai crude oil.

Oman Crude Oil

According to the data from the Joint Organisations Data Initiative (JODI), the average crude oil production from Oman for the three-year period from 2013 to 2015 was 960,000 barrels per day. The Omani Ministry of Oil and Gas puts the production levels at closer to 1-mil b/d and the JODI data from November 2015 onwards (to February 2016) supports this higher level also.

⁶ https://www.theice.com/publicdocs/futures/ICE_Futures_Europe_Brent_Index.pdf

⁷ FCA – UK Regulated benchmarks <https://www.fca.org.uk/news/press-releases/fca-regulate-seven-additional-financial-benchmarks>

⁸ The ICE Brent Index Oversight Committee <https://www.theice.com/futures-europe/brent>

⁹ <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/03/Brent-Prices-Impact-of-PRA-methodology-on-price-formation.pdf>

At present, approximately 80% of total Oman crude oil production is controlled by the Petroleum Development Oman (“PDO”), which is a joint venture owned 60% by the Oman government, 34% by Shell, 4% by Total, and 2% by Partex. In addition, Occidental Petroleum and other private oil companies have extensive oil production in Oman. Accordingly, there are multiple producers of Oman crude, rather than a single National Oil Company.

Oman is not a member of OPEC, so is not subject to OPEC production, destination or end-user restrictions. The Oman government sells most of its equity share of production through term contracts, and some of these term cargoes are resold in the spot market. The remaining share of Oman crude oil production that is owned by private oil companies is typically sold in the spot market. Thus, there is robust trading activity in the Oman crude oil spot market. The standard cargo size is 500,000 barrels, and there are typically over 50 cargoes loaded per month exported from Oman’s port, Mina al Fahal.

Dubai Crude Oil

Platts assessment of Dubai crude oil incorporates supply from Dubai, Oman, Al Shaheen (Qatar), plus Upper Zakum and Murban from Abu Dhabi. Platts Dubai assessments reflect market activity in which the Dubai buyer will accept delivery of Dubai crude oil itself, or alternative delivery of an Upper Zakum, Al Shaheen, Murban or Oman. Platts reflects the value of crude as expressed through bids, offers and trading activity in partial cargo sizes of 25,000 barrels each, with a full cargo of 500,000 barrels to be delivered when the same buyer and seller have traded 20 partials together.

Platts Dubai crude oil is one of the primary crude oil benchmarks for the Middle East and Asia, and is used by regional producers in the Middle East such as Saudi Aramco and by consumers and refiners across Asia to index their long-term contracts. In addition to futures contracts, there is an active OTC market in Dubai crude oil contracts.

Upper Zakum

ExxonMobil formed a joint venture Zakum Development Company with Abu Dhabi National Oil Company and Japan Oil Development Company Limited to operate the Upper Zakum field. According to ExxonMobil, the current production of the Upper Zakum field is at 650,000 barrels per day¹⁰, according to ADNOC and ExxonMobil.

Murban

Total is a 10% stakeholder in Murban and as of 2015 production is 1.6 million b/d with plans to increase to 1.8 million b/d by 2017¹¹.

Al Shaheen

Denmark’s Maersk is a partner in the Qatari Al Shaheen field and has published a production figure of 300,000 b/d¹². However, Qatar Petroleum announced that it had selected a different operator to run the Al-Shaheen field from July 2017. The field will be run jointly between Total and Qatar Petroleum with the goal of maintaining output at the 300,000 b/d level.

JODI publishes production statistics for Oman, the UAE and Qatar. For the UAE data, this includes Dubai, Murban, Upper Zakum and non-benchmark grade Das Island. Production from Das Island is around

¹⁰ ExxonMobil – Upper Zakum production: <http://corporate.exxonmobil.com/en/company/worldwide-operations/crude-oils/upper-zakum>

¹¹ Total – Murban Crude oil <http://www.total.com/en/media/news/press-releases/abu-dhabi-total-awarded-10-new-40-year-adco-concession>

¹² Maersk Oil – Al Shaheen crude <http://www.maerskoil.com/media/newsroom/pages/maerskoiltoleaveqatarin2017followingalshaheendecision.aspx>

600,000 b/d¹³. The Qatari production statistics include Al Shaheen and non-benchmark grade Qatar Marine. The production of Al-Shaheen is around 300,000 b/d and therefore Qatar Marine is close to 400,000 b/d. Therefore, we have applied a split of 45% for Al-Shaheen and 55% for Qatar Marine.

	2013	2014	2015	Average 2013-2015
Oman ²	947	948	986	960
UAE ³	3,048	3,036	3,189	3,091
Qatar ⁴	724	709	656	696

¹ JODI: http://www.jodidb.org/ReportFolders/reportFolders.aspx?sCS_referer=&sCS_ChosenLang=en

² Oman crude is a single grade, sold as Oman Blend

³ UAE includes Murban, Upper Zakum and Dubai. Plus non-benchmark grade Das Island (which is around 600,000 b/d)

⁴ Qatar includes Al Shaheen and non-benchmark grade Qatar Marine (split accounts for 45% Al-Shaheen and 55% Qatar Marine)

Note: For the JODI data, this is under the JODI-Oil section of the database for Primary Data (all data). Within the database, we have selected the Product as Crude Oil and Production, the countries as UAE, Oman and Qatar and the units as barrels per day.

¹³ Platts subscriber note – Das Blend <http://www.platts.com/subscriber-notes-details/21438406>

Analysis of Deliverable Supply

The Commission defines deliverable supply as “the quantity of the commodity meeting a derivative contract’s delivery specifications that can reasonably be expected to be readily available to short traders and saleable by long traders at its market value in normal cash marketing channels at the derivative contract’s delivery points during the specified delivery period, barring abnormal movement in interstate commerce.”¹⁴

We have excluded stocks data as these will tend to fluctuate depending on local supply and demand factors.

The basis of the analysis in the Brent market is BFOE loadings in the North Sea. The Exchange determined that the volume of loaded barrels of BFOE crude oil from Brent, Forties, Oseberg and Ekofisk best meets the definition of supply readily available for delivery. In addition, the Exchange has reduced the deliverable supply of Forties to account for the long term commitment for crude oil purchases by the Grangemouth refinery. The Grangemouth oil refinery is located close to the delivery point of the Forties pipeline and volumes from the outer fields are connected directly via a series of pipelines to the refinery¹⁵. Based on the most recent 3-year average of the Bloomberg data on BFOE loadings (May 2014 to April 2017), total loadings of Brent (BFOE) crude oil was approximately 881,039 barrels per day, which is equivalent to approximately 26.43 million barrels per month, or 26,430 contract equivalents (contract size: 1,000 barrels). Further, to account for the crude oil purchases by the Grangemouth refinery, the deliverable supply (using the three-year average BFOE figures) would be reduced by 3 million barrels¹⁶ per month¹⁷. The nameplate capacity of the refinery is 10 million tons per year or 6 million barrels per month. Therefore, the figure of 3 million barrels per month is based on the assumption that 50% of the crude from the Forties crude oil is processed at the Grangemouth refinery. Therefore, the total deliverable supply of BFOE is approximately **23.43 million barrels per month** which is equivalent to 23,430 contracts.

We have not made any adjustments for the local refinery demand, in the case of Dubai, Oman, Upper Zakum, Murban or Al Shaheen since the refinery off-take figures do not impact the volume of crude oil that is made available as deliverable supply. Local refineries in the region are just one outlet into which the crudes can be sold and volumes can be re-traded and re-sold into the spot market so therefore are still counted as deliverable supply.

Using the JODI production data, we have made an adjustment of 50% to the total crude oil production since Al Shaheen production is only 300,000 b/d which is 45% of the stated Qatari production with the other 55% of the volume being Qatar Marine which is a non-benchmark grade within the Platts Dubai system. For the UAE data, we have reduced this figure by the volume of non-benchmark grade Das Blend which is around 600,000 b/d. No adjustments have been made to Oman since it is a single crude stream and the data shown at a country level represents Oman crude oil only.

Production of the benchmark grades, Dubai, Oman, Upper Zakum, Murban and Al Shaheen account for about 3.6 million barrels per day. Production volumes of the individual crude streams within Platts

The basket of crudes in the Platts Dubai/Oman systems are made up of the following crudes: Dubai, Oman, Upper Zakum, Murban and Al-Shaheen. The current production levels of these fields are Oman (960,000 b/d), Murban (1.7 million barrels per day), Upper Zakum (650,000 b/d), Al Shaheen (300,000 b/d). The production levels for Dubai are more difficult to define but based on the total production volume figures for all crudes in the basket at 3.6 million barrels per day, the figure for Dubai would be put at around 50,000

¹⁴ 17 CFR 1,150-51 (2011),

<http://www.cftc.gov/ucm/groups/public/@Irfederalregister/documents/file/2011-28809a.pdf>

¹⁵ http://www.bp.com/en/global/forties-pipeline/about_fps/Technical/technical_information.html - BP Forties Pipeline system

¹⁶ UKPia – Petroineos Grangemouth Refinery capacity

http://www.ukpia.com/industry_information/refining-and-uk-refineries/Petroineos-grangemouth-refinery.aspx

¹⁷ Market suggests 50% of the processing capacity for Grangemouth is Forties therefore we have reduced the deliverable supply of Forties by 3-million barrels per month (the full capacity of the refinery is 6 million barrels per month).

b/d (or 3 cargoes of 500,000 b/d per month). Using the production level of 3.6 million barrels per day, this equates to 108 million barrels on a monthly basis or 108,000 contract equivalents.

Positions in the Brent Crude Oil vs. Dubai Crude Oil (Platts) BALMO Futures will aggregate into two legs: Brent Crude Oil Penultimate Financial Futures (Commodity Code BB) and Dubai Crude Oil (Platts) Financial Futures. The spot month limit of the Brent Crude Oil Penultimate Financial Futures (Commodity Code BB) is 4,000 contracts and the spot month limit of the Dubai Crude Oil (Platts) Financial Futures is 5,000 contracts. For the Brent, the monthly deliverable supply is 23.43 million barrels or 23,430 contracts (based on a contract size of 1,000 barrels). Therefore, based on the deliverable supply, a position limit of 4,000 contracts equates to 17.07% of the monthly deliverable supply.

For Dubai leg of the contract, this will aggregate into the Dubai Crude Oil (Platts) Financial Futures (commodity code DC) which has a current spot month limit of 5,000 lots (equivalent 5 million barrels). Therefore, based on the volumes of Dubai crude oil, this equates to 4.6% of the monthly deliverable supply volumes.

Exhibitx A**Brent BFOE Loaded volumes by delivery month**

Source: Bloomberg data

Delivery Month	Volume (bbls per month)
Aug-07	1,343,968
Sep-07	1,472,667
Oct-07	1,530,644
Nov-07	1,476,167
Dec-07	1,511,645
Jan-08	1,451,613
Feb-08	1,385,586
Mar-08	1,370,249
Apr-08	1,418,833
May-08	1,388,000
Jun-08	1,340,967
Jul-08	1,417,032
Aug-08	1,234,806
Sep-08	1,436,233
Oct-08	1,442,903
Nov-08	1,404,000
Dec-08	1,485,290
Jan-09	1,461,903
Feb-09	1,449,143
Mar-09	1,368,194
Apr-09	1,465,733
May-09	1,427,097
Jun-09	1,197,267
Jul-09	1,406,452
Aug-09	1,051,903
Sep-09	1,158,267
Oct-09	1,382,258
Nov-09	1,360,000
Dec-09	1,333,839
Jan-10	1,272,581
Feb-10	1,341,071
Mar-10	1,325,258
Apr-10	1,361,667
May-10	1,235,484
Jun-10	964,900
Jul-10	1,214,516

Aug-10	1,066,032
Sep-10	1,283,667
Oct-10	1,216,452
Nov-10	1,246,667
Dec-10	1,169,356
Jan-11	1,095,161
Feb-11	1,201,786
Mar-11	1,074,194
Apr-11	1,125,000
May-11	938,710
Jun-11	1,003,333
Jul-11	969,355
Aug-11	922,581
Sep-11	965,000
Oct-11	1,048,387
Nov-11	1,081,667
Dec-11	1,082,258
Jan-12	1,030,645
Feb-12	1,003,448
Mar-12	951,613
Apr-12	906,667
May-12	956,452
Jun-12	926,667
Jul-12	832,258
Aug-12	793,548
Sep-12	700,000
Oct-12	696,774
Nov-12	819,667
Dec-12	872,581
Jan-13	832,258
Feb-13	921,429
Mar-13	870,968
Apr-13	880,000
May-13	893,548
Jun-13	720,000
Jul-13	832,258
Aug-13	735,484
Sep-13	800,000
Oct-13	870,968
Nov-13	980,000
Dec-13	967,742

Jan-14	890,323
Feb-14	942,857
Mar-14	967,742
Apr-14	880,000
May-14	832,258
Jun-14	840,000
Jul-14	851,613
Aug-14	716,129
Sep-14	820,000
Oct-14	909,677
Nov-14	860,000
Dec-14	909,677
Jan-15	870,968
Feb-15	942,857
Mar-15	909,677
Apr-15	900,000
May-15	922,581
Jun-15	840,000
Jul-15	890,323
Aug-15	832,258
Sep-15	940,000
Oct-15	967,742
Nov-15	900,000
Dec-15	929,032
Jan-16	974,194
Feb-16	950,690
Mar-16	870,968
Apr-16	960,000
May-16	870,968
Jun-16	760,000
Jul-16	812,903
Aug-16	812,903
Sep-16	780,000
Oct-16	793,548
Nov-16	880,000
Dec-16	909,677
Jan-17	987,097
Feb-17	900,000
Mar-17	909,677