METHODOLOGY AND SPECIFICATIONS GUIDE
EUROPE AND AFRICA REFINED OIL PRODUCTS

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INTRODUCTION

Platts methodologies are designed to produce price assessments that are representative of market value, and of the particular markets to which they relate. Methodology documents describe the specifications for various products reflected by Platts assessments and indexes, the processes and standards Platts adheres to in collecting data, and the methods by which Platts arrives at final assessment values for publication.

Platts discloses publicly the days of publication for its price assessments and indexes, and the times during each trading day in which Platts considers transactions in determining its assessments and index levels. This schedule of publication is available on Platts website, at the following link: http://www.platts.com/HolidayHome.

The dates of publication and the assessment periods are subject to change in the event of outside circumstances that affect Platts ability to adhere to its normal publication schedule. Such circumstances include network outages, power failures, acts of terrorism and other situations that result in an interruption in Platts operations at one or more of its worldwide offices. In the event that any such circumstance occurs, Platts will endeavor, whenever feasible, to communicate publicly any changes to its publication schedule and assessment periods, with as much advance notice as possible.

All Platts methodologies reflect Platts commitment to maintaining best practices in price reporting.

How this methodology statement is organized

This description of methodology for indexes and assessments is divided into seven major parts (I-VII) that parallel the entire process of producing the end-of-day price values.

- Part I describes what goes into Platts indexes and price values, including details on what data market participants are expected to submit, the process for submitting data and criteria for timeliness of market data submissions.
- Part II describes any security and confidentiality practices that Platts uses in handling and treating data, including the separation between Platts price reporting and its news reporting.
- Part III is a detailed account of how Platts collects bids, offers, trades and other market data, and what Platts does with the data to formulate its indexes and assessments. It includes descriptions of the methods that Platts uses for reviewing data, and the methods used to convert raw data into indexes and assessments. This also includes the procedures used to identify anomalous data. This section describes how and when judgment is applied in this process, the basis upon which transaction data may be excluded from a price assessment, and the relative importance assigned to each criterion used in forming the price assessment. This section describes the minimum amount of transaction data required for a particular price assessment to be published, and the criteria for determining which values are indexes, and which are assessments. This is based on reported transactions and other market information. Finally, this section describes how Platts addresses assessment periods where one or more reporting entities submit market data that constitute a significant proportion of the total data upon which the assessment is based.
- Part IV explains the process for verifying that published prices comply with Platts standards.
- Part V lays out the verification and correction process for revising published prices and the criteria Platts uses to determine when it publishes a correction.
- Part VI explains how users of Platts assessments and indexes can contact Platts for clarification of data that has been published, or to share a complaint. It also describes how to find out more about Platts complaint policies.
- Part VII is a list of detailed specifications for the trading locations and products for which Platts publishes indexes or assessments in this commodity. This section describes why specific units of measurement are used, and what conversion factors are used to move between units of measurement, where relevant.

PART I: DATA QUALITY AND DATA SUBMISSION

Platts’ objective is to ensure that the submission of transactional information and other data inputs that editors use as the basis for their price assessments is of the highest quality. Ensuring that data used in Platts assessments is of high quality is crucial to maintaining the integrity of Platts various price assessment processes.

Platts encourages entities that submit any market data for consideration in its assessment processes to submit all market data that they have which may be relevant to the assessment being made. Platts’ aim is to determine the full circumstances surrounding all reported transactional data, including details of quality, specifications, order sizes, dimensions, lead times and any locational and loading/delivery information. Platts uses that information to determine a typical and repeatable market level for refined oil products being assessed.

As part of its standard editorial practise, Platts routinely reviews the companies participating in its price assessment processes. These reviews ensure the suitability of data and information that are used to formulate Platts end-of-day price assessments. These reviews are conducted on a regular basis, and may take into consideration an array of issues including, but not limited to, adherence to editorial guidelines, operational and logistical issues, as well as counterparty acceptance.

The reviews are not designed to impede a company’s ability to bilaterally engage in market transactions; the objective at all times is to ensure the integrity of published price assessments. Platts does not disclose the nature or scope of routine reviews of data providers that participate in its price assessment activities.
What to report

- Firm bids that are open to the marketplace as a whole, with standard terms
- Firm offers that are open to the marketplace as a whole, with standard terms
- Expressions of interest to trade with published bids and offers, with standard terms
- Confirmed trades
- Indicative values, clearly described as such
- Reported transactional activity heard across the market, clearly described as such
- Other data that may be relevant to Platts assessments

How to report

Platts accepts information provided for publication in real-time across a wide variety of media. The following reporting methods are accepted by Platts editorial staff:

- Commonly used Instant Messaging software
- eWindow
- Telephone
- Email
- Fax

Platts accepts any reasonable method of delivery/communication for bids, offers and transactions. Platts editors typically communicate with trading companies through phone, eWindow or online instant messaging systems. Platts tries to accommodate the communication needs of its customers and will endeavor to open any additional communication channels required. Other means of communication, such as emails during the assessment process, are acceptable but are considered to be atypical. If a market participant chooses to communicate with Platts editorial using such atypical means, this needs to be highlighted well ahead of the assessment process.

Reporters covering the products markets in Europe are on the phone from around 09:30 to around 18:30 London time. The list below gives key telephone and Instant Messaging contact points for Platts European products team effective June, 2009. Please note that all telephone numbers and Instant Messaging IDs are subject to change.

In support of Platts communication processes and in light of the announced discontinuation of the legacy Yahoo! instant messenger application in mid-2016, Platts began to use more broadly the ICE Instant Messenger tool for communication within the oil, petrochemical, RIN, biofuel markets and other adjacent spaces as needed. Additionally, Platts supports the web versions of Skype and the enterprise level Skype for Business for communication across any market. Platts remains open to accepting messages through other IM channels.

Platts assesses the value of oil globally using its Market on Close (MOC) assessment process. The MOC assessment process establishes core standards for how data is collected and published, how data is prioritized by value, and ultimately how data is analyzed in the course of completing Platts assessments.

Transparency underpins Platts data publishing processes in the oil markets. Under Platts MOC guidelines for collecting and publishing data, Platts publishes market information including but not limited to firm bids and offers from named companies, expressions of interest to trade and confirmed trades that are received from market participants throughout the day.

This information is published in real-time, as it is received, on Platts information service, Platts Global Alert. Platts publishes all information received so that it can be fully tested by the market at large. Information collected and published includes the identities of buyers and sellers, confirmed prices, volumes, location, and stated trading terms.

Platts assessments are designed to reflect repeatable market value at the close of the assessment process. Platts tracks market price evolution during the entire day, and publishes a wide range of data relating to market value as it does so. All data that has been published through the day is analyzed during the assessment process. Towards the close of the day, Platts focuses its assessment process to publish named firm bids and offers, expressions of interest to trade and confirmed trades, with all relevant details. This transparent data is prioritized in the assessment process, because it is available to the entire market for testing.

In order to ensure that all firm bids and firm offers that still stand at the close of the assessment process have been fully tested in the market at large, Platts has established clearly defined time cut-offs that apply when publishing firm bids and firm offers in the MOC process. Time cut-offs for the submission and subsequent publication of new bids and offers are applied so that MOC participants cannot bid or offer late in the process, and to ensure that every bid and offer published by Platts is logistically executable.

Bids and offers published by Platts are considered to be firm until Platts is informed otherwise, or until the close of the
assessments process for the day, whichever comes first. Platts expects all participants in the MOC process to be contactable at all times.

Platts will consider all firm bids and offers as open to the market at large and executable unless informed otherwise by the counterparty submitting the market information. If no communication is made to Platts to withdraw or change the parameters of the bid or offer it is assumed that it is available to the marketplace. Platts seeks verification of any transaction originating from a bid or offer submitted for inclusion in the Platts MOC process.

**MOC Publishing Process**

Detailed guidelines on MOC timings can be found at [http://www.platts.com/IM.Platts.Content/MethodologyReferences/MethodologySpecs/Oil-timing-increment-guidelines.pdf](http://www.platts.com/IM.Platts.Content/MethodologyReferences/MethodologySpecs/Oil-timing-increment-guidelines.pdf). The purpose of the time cut-offs is primarily to ensure logistical executability and standards of incrementability and repeatability to ensure orderly price discovery. As such, they may be changed at short notice if evolving market conditions require.

To ensure proper dissemination of market information, new bids and offers for publication by Platts must be received by Platts no later than stated cut-off periods.

In order to ensure that all published data is fully tested in the market, Platts has established guidelines around how quickly bids and offers may be improved when they have been published, and by what amount. These incrementability guidelines define the quantum and speed at which bids and offers may typically be improved in the MOC assessment process. Incrementability does not apply to bids and offers that are moving away from market value, though Platts analyzes bids and offers that are moving away from market value, though Platts may notify the market of any adjustment to the standard increments in the event of market volatility or a disruptive event. A market participant can withdraw a bid or offer from Platts MOC process at any time, so long as no other potential trading counterparty has indicated that it has interest to buy or sell into the bid/offer.

Platts expects market participants bidding and offering in the MOC process should perform on their bid/offer with the first company of record to express interest to Platts for publication during the MOC process. In the event of a dispute on the timing, Platts will review its records and determine which company communicated to Platts first its intention to execute on a bid/offer displayed on the Platts systems. All the Platts systems operate on a first come, first served basis. This sequence is critical for orderly price discovery.

Platts editorial guidelines governing its assessment process require it must consider only those transactions, bids or offers where market participants perform under typical contractual terms. Platts accepts that individual companies may have trading limits with counterparties and that national legislation may prevent companies from dealing in materials of certain origins. Such counterparty issues are dealt with on a case-by-case basis. Platts cannot make any guarantee in advance about how and whether market information received and published not fully adhering to its defined methodology will be incorporated in its final assessments.

All bids and offers are firm from the moment of submission. For information communicated directly to a reporter, rather than through the eWindow software, bids and offers for inclusion in the assessment process are to be submitted prior to the cut-off times as listed in the timings and increments guide.

Submissions of bids, offers or transactions should not be considered as received by Platts unless acknowledged as received by Platts. For communication initiated by phone Platts will consider the time when the trader actually communicated the bid/offer or transaction. Acknowledgment may take the form of “yes,” “OK,” “y,” “k,” or any other reasonable forms, including by sending back the published information.

Bids and offers submitted on time but in an incomplete form, where the terms are only clarified after the cut-off deadline, will not be used in the assessment process.

As a general recommendation Platts advises market participants not to wait for the last possible minute before the cut-off deadlines for bids and offers, as the communication may not be completed on time.

A buyer or seller can communicate with Platts directly to express buying or selling interest. Platts may also take into consideration bids and offers made via a broker, provided the buyer or seller have communicated to Platts that they have authorized the broker to speak on their behalf.

Platts only considers for publication and assessment transactional interest that is expressed by participants for bids or offers that have already been published by Platts. Interest in bids or offers at prices that have not been published, and therefore may not be fully available for testing in the marketplace as a whole, may be disregarded. Should a buyer lower its bid or a seller increase its offer, an expression to trade at a previously published level will not be considered.

Platts editorial processes require full clarity when communicating bids/offers and intentions to trade. When expressing an intention to hit a bid or lift an offer in the MOC processes, any message should typically include the specific price of the trade and the name of the counterparty. Information may not be published if it is not sufficiently clear when communicated to Platts.

Wide laycan dates should also be narrowed by the buyer/seller where applicable. In the case of middle distillate barges, buyers should provide the volume at the time of lifting an offer, e.g., “Buyer 1 wants Seller 1 ULSD barge offer at September + $25/mt for 2kt”, would be best practice. Platts reserves the right not to publish indications to trade that do not meet the above conditions.

Platts recognizes the time of receiving a message of a company’s intent to buy/sell, as opposed to the time a message was sent by the trading party.
Following any trade, an intention to rebid or reoffer must be received by Platts as soon as is possible and within a reasonable time frame.

Unless sellers/buyers expressly inform Platts of their continued interest to buy/sell after a deal, Platts will presume the original buyers or sellers are not there for additional volume.

A rebid or reoffer must match the initial position’s parameters, with the exception of price. A rebid or reoffer can be made at the same level or inferior to the traded price. For example, Company B hits Company A’s bid for $500/mt during the MOC. Company A can rebid at $500/mt or below this level. If the MOC process for the market includes a “freeze” period at the close of the process, bids and offers may only be repeated at the last published price.

When there are multiple bids or offers at the same level, the first person to reach the market maker bid/offer level is the first person to be filled. Subsequent deals will go to the second, third and fourth market maker. When a market maker is filled, any repeat of their bid/offer will move to the back of the bid/offer queue.

In the event that more than one counterparty expresses his/her intention to execute a transaction based on an existing bid or offer, the logical counterparty should be the first party that demonstrated its intention to trade. Platts will monitor time stamps or any other available time mechanism in the event of a dispute with the aim of determining who the first potential buyer of record was. In the event of the market maker rebidding or reoffering, the queue of market takers expressing interest in that position will reset. Platts will not consider any interest expressed in a rebid or reoffer before the position is published to be executable during the MOC assessment process.

After a bid or offer is published, only price can be changed, while in certain markets volume may be adjusted to be multiples of a minimum volume. The quality or loading/delivery timing cannot be changed. Buyers or sellers can withdraw bids/offers at any time, provided no prior interest to transact has been expressed by any potential counter-party. If a market maker takes out another position during the MOC assessment process, they must communicate to Platts if they wish to withdraw their existing position following the trade. Otherwise, it is assumed the market maker’s own position remains active.

Bids/offers and trades are subject to validation and verification by Platts editors. Entry of a bid, offer or transaction stemming from a bid or offer made in the assessment processes by Platts should be interpreted as an acceptance of Platts’ editorial protocols.

All participants that have reported bids and offers for publishing in the Platts process are expected to promptly report any transactions stemming from available bids or offers reported to Platts as part of the MOC assessment process.

Platts synchronizes its computer clocks every day precisely, and will compare the time of any submitted bid, offer or transactional interest against this synchronized time. Please note that Platts applies the timing deadlines strictly.

For the purposes of clock synchronization, market participants may find the following internet link to be helpful: www.time.gov. This link offers an atomic clock reading for US time zones.

In markets where Platts eWindow is in operation, the eWindow clock will be used to determine the correct sequence of events when a bid or offer is amended, withdrawn, or traded by an interested counterparty. Bids or offers submitted by phone, or any other medium, such as instant messaging software, shall be clocked at the time the bid, offer or trade indication is actually transmitted through the Platts eWindow system. As per Platts methodology, buyers or sellers can withdraw bids/offers at any time when communicating through eWindow, provided no prior interest to transact has been expressed by any potential counterparty. All bids and offers are firm from the moment submitted into Platts eWindow to the moment they are traded, the window period closes or the bid/offer is withdrawn from the system by the trader or a Platts editor.

Platts is an information company and it aims to publish any credible bid or offer reported to it. Platts makes no commitment to publish every bid or offer submitted to it, however. For instance, frivolous bids and offers may not be retransmitted.

Terms of trade such as quality, delivery port, timing of delivery/loading and price are fully up to the company issuing the bid or offer.

Atypical bids, offers and trades
Platts may publish bids, offers and trades with atypical pricing terms, including benchmark bases and timing. Market information with atypical pricing inherently differs in value from the typical and commonly observable information in the market.

Bids and offers which are deemed as atypical relative to the market may not be fully taken into consideration for the assessment process. In the absence of an associated, liquid derivative instrument atypical pricing bases may be difficult or impossible to evaluate on an outright price equivalent.

Such bids/offers or transactions would be at best indicators of an overall market condition but they would not be seen as exact indicators of market price.

Any unusual condition or request regarding a commodity should be specified at the moment the initial bid or offer is made. Any unusual request that surfaces at the time a counterparty is ready to trade and that impedes the normal flow of a transaction could be seen as an impediment to trade.

Information reported by market participants that may have legal implications, including but not limited to potential libel, will not be published.

Market participants are encouraged to inform Platts when they cannot trade with another typical market participant due to performance, credit or legal issues before the cut off deadlines for initial bids and offers. Platts may ask market participants to provide supporting documentation to ensure the integrity of its assessment process.

Survey assessment methodology
Platts applies a survey assessment methodology where market conditions do not support an MOC assessment environment. Platts collects a wide variety of transactional and market
information through a survey of participants, which typically includes communicating with sources via phone, email, and instant messaging, among other communication methods. Although the survey assessment methodology is in many respects similar to the MOC assessment methodology there are key distinctions between the assessment approaches.

In such environments, Platts collects as much data as possible, including bids, offers, interest to trade, transactions that have been previously concluded, and indications of value from participants in the market. Platts seeks to collect, confirm and analyze as much information as possible in survey markets, and encourages market participants to provide all relevant information. Platts publishes credible information collected that meets our methodological standards, typically through real-time information services and with as much transparency as possible. This information is considered when determining and completing a final assessment.

All Platts market reporters are trained to analyze the data they receive and to question sources to establish the fullest set of information possible around price data. Reporters are trained to seek a wide variety of information to test reported transactional activity, including the specific price agreed, the counterparty to the trade, the point of origin and destination for delivery of the commodity, the size of the transaction, any physical quality commitments agreed as part of the transaction, the terms and conditions of a trade and when a trade was agreed.

Survey and MOC environments are linked. Survey assessment environments are a common ground for future MOC assessment environments, and Platts regularly reviews its survey environments to determine which may be suited to an MOC approach. Similarly, MOC environments are underpinned by data collected by surveying sources throughout the day, to ensure that Platts is aware of market value as the MOC process begins, and so that Platts has data to review when considering information.

For analysis of the data, Platts survey methodologies will typically give priority to data collected that is confirmed and published, and which is most relevant to closing value in the markets covered.

**Law**

Contracts using English law are considered standard in the assessment process.

**Embargoed products**

Laws stating that nationals from specific countries may not buy products from embargoed countries may prevent market participants from lawfully executing transactions. A seller therefore may not assume that a buyer has the obligation to buy embargoed materials. Under Platts Market on Close assessment guidelines, commodities supplied from countries or entities that are subject to trading embargoes and sanctions recognized under international law should not be delivered against transactions concluded during the Platts MOC assessment processes. Bids and offers that contain statements surrounding delivery of embargoed materials will be considered by Platts for publication, and if published after review may be subject to normalization in value.

**Late performance**

Platts is aware that physical conditions regarding shipping, terminals, tanks, or blending which are beyond the control of the seller or buyer may result in lateness, quality issues or conditions seen as a deviation from the original wording in the contract, for example late delivery/loading.

These deviations will be seen in the larger context of physical trading, and should not be seen as an indication of Platts condoning lateness.

Platts will review patterns of logistical performance, as adjustments due to late performance and/or quality issues should be extraordinary and not recurring events.

Participants who are intending to sell should not offer when there is a known and distinct possibility that loading/delivery may be delayed. If congestion or delays prevent performance under the contractual terms, the seller should make reasonable and timely efforts to supply from an alternative source, or the seller should engage in other measures to alleviate the buyer’s exposure.

Equally, a buyer should not over-commit and then aggregate nominations in a way that makes it logistically impossible for the seller to perform.

Platts will take appropriate steps to ensure the integrity of its assessments if issues of non-performance should arise.

In summary, performance is paramount and all bids and offers must be firm and transactions should be performable within the contractual parameters.

Platts only recognizes bids, offers and transactions where no party claims a right to unilaterally cancel a transaction. If a transaction becomes difficult the party causing the issue must seek resolution including alternative loadings, qualities, dates or book outs.

**Compensation**

Platts only publishes bids, offers and transactions on the basis that participants will fulfil the full value of the physical contract.

A party deemed to have underperformed or not performed under the original contract is expected to compensate the affected party.

In almost all circumstances, the compensation is not, and should not be due to a flat price change, but should include parameters such as backwardation, shipping costs, and the inconvenience for the buyer in the case of a seller not performing, or contango, storage costs and the inconvenience for the seller in the case of a buyer not performing. Compensation should not include consequential costs.

Such adjustments should be fair and in line with market practice, and should be reciprocal in the event that the inverse situation occurs in the future.

Compensation is subject to editorial review to ensure market practices and overall fairness in the transaction have been followed. Platts review may include proposals/arrangements to protect the integrity of its assessment process.
Force majeure
Force majeure is part of trading and may be invoked under very special circumstances. Platts editors will monitor the application of it to ensure that force majeure is not invoked frivolously.

Booking out trades
Booking out trades done during the Platts Market on Close assessment process is acceptable under exceptional circumstances. A stressed party may request to book out a trade, but its counterparty is under no obligation to accept such request.

In those exceptional cases where both counterparties agree to book out a trade, Platts expects the original spirit of the contract to be fulfilled where the non-performing party offers to buy/sell back the position and compensates the affected party.

In almost all circumstances, the adjustment is not and should not be due to a flat price change, but should be to include parameters such as backwardation, shipping costs and the inconvenience for the buyer or seller expecting a normal transaction. Such adjustments should be fair and in line with market practice, and should be reciprocal in the event that the inverse situation occurs in the future.

Furthermore, circle outs may occur when the original seller sells a cargo that is later sold into a third party that has a sale into the primary seller. Such “circle outs” are considered a normal part of trading as sometimes chains originate and finish at the same point.

Book outs and circle outs are subject to editorial review to ensure market practices and overall fairness in the transaction have been followed. Platts review may include proposals/arrangements to protect the integrity of its assessment process.

Review of trades
Platts tracks all circumstances surrounding trades reported during its MOC assessment process, and any issues regarding performance. Platts not only focuses on the performance of the transaction at the time of trade, but also on any significant issues stemming from such trades, including logistics and eventual delivery of the product. Trades executed through the Platts Market On Close assessment process may be reviewed from time to time for performance completion. Platts therefore may request documentary material to determine performance and validity. Such material may include details of fuel quality, terminal, vessel and laycan nominations. MOC trades may be subject to editorial review to ensure market practices and performance in the transaction have been followed.

A failure to meet Platts guidelines for participation and performance in the MOC may lead to an event driven review. Event driven reviews are designed to help ensure that transactional information and other data inputs used as the basis for Platts price assessments are representative of market value on an ongoing basis.

A failure to meet Platts guidelines for participation and performance in the transaction at the time of trade, but also on any significant issues stemming from such trades, including logistics and eventual delivery of the product. Trades executed through the Platts Market On Close assessment process may be reviewed from time to time for performance completion. Platts therefore may request documentary material to determine performance and validity. Such material may include details of fuel quality, terminal, vessel and laycan nominations. MOC trades may be subject to editorial review to ensure market practices and performance in the transaction have been followed.

Review of trades
Post-deal tracking enables Platts to determine the actual performance of the participants in the trade and the validity of their inputs. Platts may publish confirmation of trade performance information.

Specification
Platts assessments will reflect typically traded qualities of products. Specifications are available in Section VII of this document and on the Platts website www.platts.com.

Testing of products
Products traded are subject to standard testing techniques and protocols to determine contractual performance. Platts typically follows the standards already in place in the trading market, although it may monitor these to ensure that the standards are adequate.

Platts FOB and CIF assessments reflect trades where the quality and quantity are established at loadport, except in cases of fraud and/or manifest error. This does not preclude a buyer from potentially having a valid claim if the original test of a loadport sample is proven to be inaccurate because the results of the original test cannot be repeated and/or reproduced within reasonable parameters through subsequent re-testing of the original loadport sample. Platts considers retesting of retained samples a necessary step to determine if the original test was fully reflective of the quality delivered, and sellers should not reject such requests for retesting. Buyers’ requests to re-test the load port sample should be made only in cases where later testing differs from the load port test beyond repeatability and/or reproducibility.

Implied guarantees in specifications
Bids and offers submitted to Platts that include numerical specifications will be assumed to have a series of zeroes to the right of the decimal point or to the right of the last digit to the right of the decimal point.

As an example, a fuel oil cargo with a maximum guarantee of 0.1 Shell Hot Filtration will be considered as 0.1000 etc. If the specification guarantees are otherwise, the buyer or seller should specify it clearly to avoid potential disputes.

Merchantability
Platts only considers in its assessments products that are merchantable. Hence, buyers may assume that offers or transactions are for a product that is merchantable. Sellers must ensure their offers or transactions are for merchantable products.

PART II: SECURITY AND CONFIDENTIALITY

Data is stored in a secure network, in accordance with Platts policies and procedures. Platts refined oil product assessments are produced in accordance with Platts Market on Close assessment methodology. This means that all data for use in Platts refined oil product assessments may be published by Platts editorial staff while assessing the value of the markets.

Platts does not have confidentiality agreements in place for information that is sent for use in its refined oil product assessments.
PART III: CALCULATING INDEXES AND MAKING ASSESSMENTS

The following section describes how Platts uses the specific volume, concluded and reported transactions, bids, offers and any other market information it has collected, in the manner described in section one, to formulate its price assessments. Additionally, this section describes other information, including the normalization of market data, assumptions and extrapolations that are considered when making a final assessment.

MOC price assessment principles

Through the MOC assessment process, Platts considers market information gathered throughout the normal trading day, and publishes such information throughout the day. Platts analyzes all published information in determining its final published price assessments.

Platts seeks to establish and publish the value of markets that prevail at the close of the assessment process. Platts has aligned the timestamps reflected in its assessments with what typically is a period of high activity in the markets that Platts observes. The typical period of high activity in oil markets tends to be in the afternoon in every major trading location around the world. Platts believes that aligning its price assessments to typical periods of greater market activity and liquidity provides a robust basis upon which to derive a reliable assessment of market value.

Platts has adopted the MOC methodology in order to provide complete clarity over the precise point in time reflected in its market assessments. Like the quality of oil, its delivery location, delivery dates, contract terms, and the volume to be supplied, the time of commercial activity is an important attribute considered in Platts price assessments. The time that a bid or offer is shown to the market, or a transaction concluded, is vitally important in understanding the market value of the respective commodity, in the same way that the quality of the oil, where it will be delivered and when it will be delivered are important factors. By clearly reflecting value at a defined point in time Platts is able to properly reflect outright and spread value.

The clarity established by providing a well-defined timestamp is also important for understanding the relationships between the markets that Platts assesses. By ensuring that all assessments within a region reflect market value at the same moment in time, spreads that exist between those products are also able to be fully and properly reflected. For example, comparing the value of gasoline to crude oil is possible when both value have been determined at the same moment in time. By contrast, comparing the price of gasoline in the morning, to crude oil in the afternoon, might deeply impair the relationship between the products – particularly when the respective market prices move independently during the intervening period.

By providing clear timestamps for assessments, the Platts MOC process is designed to provide assessments that properly reflect outright and spread value during times of high volatility equally well as in times of modest volatility.

MOC guidelines are designed to avoid distortion of the final price assessments by eliminating inputs that are not fully verifiable, and by disregarding one-offs or unrepeatable transactions, or those that may distort the true market level. Transactions between related parties are, for instance, not considered in the assessment process.

Deals done below the level of prevailing bids or above the level of prevailing offers (i.e., selling through the bid or buying through the offer) will not be reflected in Platts assessments. Platts will only publish expressions of interest to trade with the most competitive, tradeable bid or offer available.

Platts does not specify a minimum amount of transaction data, or a transaction data threshold, for the publication of its price assessments. Physical commodity markets vary in liquidity. Any particular market analyzed on its own will typically demonstrate rising and falling levels of transactional activity through time. Platts is committed to providing an assessment of value for every market that it covers, equally well in times of heightened or reduced liquidity.

Platts seeks to receive market information from as broad a cross section of the market as possible. If a very limited number of market-makers are active in the market, or if a limited number submit data that constitutes a significant proportion of the total data upon which the assessment is based, Platts will continue to seek fully transparent and verifiable data from the market at large and to apply Platts methodology principles of transparency and time sensitivity. Platts considers data for assessment of any market where a single company provides more than half of all available information to be one where such a company provides a significant proportion of data. For consideration in the MOC process such a company’s bids or offers must be clearly available for execution by any other potential MOC trading counter party.

Normalization price adjustment techniques

Platts seeks to align the standard specifications for the oil markets it assesses and the timestamps reflected in its assessments with standard industry practice. However, physical commodity markets are generally heterogeneous in nature. Key attributes often vary from the base standard reflected in Platts assessments as oil is supplied to market.

The quality of fuel supplied, delivery location, and other specific terms of trade may vary in the physical commodity markets assessed by Platts. This is one reason among many why data collected from the physical oil markets may not be simply averaged to produce a representative assessment value.

Because of the complex nature of the physical oil markets, oil market data typically must be aligned with standard definitions to allow for a fully representative final published assessment. Platts aligns data collected through an analysis of the physical oil markets with its standard assessment specifications through a process called normalization.

Normalization is an essential price adjustment technique used to align reported market information to the base standard reflected in Platts price assessments.
Platts establishes the level of normalization by surveying markets and observing the economic impact of variance from the base standard. This is done by analyzing freight rates (for locational differences), quality premiums (for quality differences), the movements of all markets through time (for time differences) and other premiums associated with the size of trades and delivery terms.

Normalization for time may be done by analyzing movement in a related market observed through time, and that movement may provide a basis by which to align market value of an earlier reported bid, offer or transaction to market value at the MOC close. The alignment for time is essential to ensure that Platts price assessments reflect the prevailing value of a market at the close of the MOC process.

Prioritizing data

Transparency underpins Platts assessment process, just as it does Platts data publishing processes. Platts assessment process considers firm bids, firm offers and arms-length transactions that are transparent and open to sufficient, credible counterparties. Bids, offers or transactions that are not transparent may not be considered in the assessment process. Bids above transparent offers or offers below transparent bids are not considered in the assessment process. Platts considers changes to bids or offers when those changes are made transparently and in normal increments.

When determining a final market assessment, Platts gives the greatest priority to fully verifiable and transparent market information. A firm bid or offer that has been published by Platts in accord with its data publishing standards, and which still stands open to the marketplace at the close of the assessment process, will establish clear parameters for Platts final published assessments. Platts will typically assess market value between the best bid and best offer open to the market at the close of the MOC process. This ensures that Platts assessments reflect the transactional value at the close.

Completed, transparent transactions that are fully published by Platts are important in helping establish where trading interest prevails in the market, and may help determine where, in a bid/offer spread, Platts may assess value for publication.

Firm bids and offers that are available to the entire market take precedence over trades that have been concluded earlier in the assessment process when establishing the value of the market, particularly if bids are available at the close above previously traded levels, or offers are available to the market below previously traded levels. Value is a function of time.

Similarly, firm bids and offers that are available to the entire market take precedence over transactional activity reported to Platts after the fact.

The level of each bid or offer must stand firm in the marketplace long enough for any counterparty to transact; otherwise the bid or offer may be deemed non-executable. Platts may not consider bids, offers or transactions that are the result of market gapping. Gapping occurs when a bid and an offer are more than one increment apart and a trade occurs. Platts will analyze and evaluate such trades for their representative value. They may not be fully reflected in the final assessment.

Platts MOC guidelines are designed to avoid any distortion of the final price assessment and so inputs that are not verifiable are eliminated and "one-off" or unrepeatable transaction data may be disregarded from the price assessment process.

Platts assessment process is designed to avoid any distortion of the final price assessment and so inputs that are not verifiable are eliminated and “one-off” or unrepeatable transaction data may be disregarded from the price assessment process.

Assessment Calculations

Units of measurement

Platts publishes its assessments reflecting the currencies and units of measurement in which the products typically trade.

Oil is generally traded in US dollars, and Platts assessments are typically published in that currency as a result. Certain markets, such as regional markets, trade using local currency. Platts assesses the value of such markets as appropriate in local currency.

Crude oil is typically traded in barrels or metric tons, and Platts publishes its assessments using these units of measurement as they prevail in practice. Likewise, refined oil products typically trade in barrels, metric tons, kiloliters or gallons, and Platts assessments for these markets reflect common practice in each market. The minimum and maximum volume considered for each individual Platts assessment of a physical market is described in section VII of this document.
In certain cases Platts converts its assessments to other currencies or units of measurement to allow for ease of comparison or analysis in regional markets. Such conversions are done using exchange rates published regionally. Conversion factors are described in section VII alongside individual assessment codes.

**Editorial judgement**

Platts reporters follow specific methodology when exercising editorial judgment during their assessment process. Platts editors apply judgment when determining (1) whether information is suitable for publication; (2) when and how to normalize data and (3) where to assess final value. All such judgment is subject to review by Platts editorial management for adherence to the standards published in Platts methodologies.

Judgment may be applied when analyzing transactional data to determine if it meets Platts standards for publication; judgment may also be applied when normalizing values to reflect differences in time, location, and other trading terms when comparing transactional data to the base standard reflected in Platts assessments.

The following section illustrates how these guidelines work when calculating indexes and making assessments.

To ensure the assessments are as robust as possible, Platts editorial systems are backed by a strong corporate structure that includes managerial and compliance oversight. To ensure reporters follow Platts methodological guidelines in a consistent manner, Platts ensures that reporters are trained and regularly assessed in their own and each other’s markets.

Professional judgment guidelines promote consistency and transparency and are systematically applied by Platts. Where professional judgment is exercised, all information available is critically analyzed and synthesized. The various possibilities are critically analyzed and fully evaluated to reach a judgment. Platts manages and maintains internal training guides for each of the different products assessed which aim to ensure Platts price assessments are produced consistently. Platts price assessments are reviewed prior to publication and exercise of professional judgment is further discussed and verified during this process. Finally, consistent with the concept of proportionality, assessments that are referenced by derivatives contracts are supported by assessment rationales. These rationales explain the application of judgment and are published together with the relevant price assessment, offering full transparency to the market.

Reporters are trained to identify potentially anomalous data. Platts defines anomalous data as any information, including transactions, which is inconsistent with or deviates from our methodology or standard market conventions.

As a publisher owned by S&P Global, independence and impartiality are at the heart of what Platts does. Platts has no financial interest in the price of the products or commodities on which it reports. Platts aim is to reflect where the actual market level is.

Platts focuses primarily on assessing the value of oil trading in the spot market. A spot price for a physical commodity is the value at which a standard, repeatable transaction for merchantable material takes place, or could take place, in the open market at arms’ length. In oil, Platts spot price assessments reflect this value at precisely the close of the MOC process.

Platts overall objective is to reflect the transactable value of the commodity assessed. In cases where the apparent value of the commodity includes extra optionalities, the intrinsic value of the commodity may be masked. In such cases, Platts may use its editorial judgment to factor out such extraneous elements from the value of the commodity, or it may decide not to use the bid, offer or transaction in its assessment process. Optionalities that may mask the value of the commodity include but are not limited to loading or delivery options held by the buyer or seller, size option tolerances exercisable by the buyer or seller, or quality specifications.

**Outright, differential and spread prices**

Platts assesses the outright value of oil around the world, as well as differentials for oil when it trades with reference to a benchmark. Platts analyzes all data collected and published by Platts throughout the day. Final assessments are above firm bids, and below firm offers, that stand at the close of the Market on Close assessment process. This is true for outright values and differentials.

Platts physical price assessments use a variety of inputs, including outright price bids/offers, floating price bids/offers, spread price bids/offers (including EFPs, EFSs etc) and combinations of fixed and floating prices. Platts’ objective is to assess the prevailing tradable outright price of the commodity at the close of the market assessment period. In the event of an observed conflict between outright values and differentials or spreads, outright values prevail in Platts final published assessments.

Platts establishes the hedgable, outright value of floating and spread price indications by applying them to the observable, prevailing value of underlying relevant derivatives instruments. In the event of conflicts observed between the outright values derived from floating and spread prices with different underlying references, Platts takes into account considerations that include the relative liquidity of each relevant derivatives market, and the typicality of a given spread or floating price, when exercising judgement around whether to prioritize one particular floating price or spread over another.

Platts may publish bids, offers and trades with atypical pricing terms, including benchmark bases and timing. Market information with atypical pricing inherently differs in value from the typical and commonly observable information in the market.

Bids and offers which are deemed as atypical relative to the market may not be fully taken into consideration for the assessment process. In the absence of an associated, liquid derivative instrument atypical pricing bases may be difficult or impossible to evaluate on an outright price equivalent.

Such bids/offers or transactions would be at best indicators of an overall market condition but they would not be seen as exact indicators of market price.
Timing
Platts produces time-sensitive assessments that reflect the value of the markets it covers precisely at the close of the MOC price assessment process in Singapore, Tokyo, Dubai, London and Houston. By providing clear timestamps for every region the Platts assessment process is designed to provide price assessments that properly reflect outright and spread value.

As an example, gasoline has a value, naphtha has a value and the gasoline versus naphtha spread has a value, and all three match when measured at the same time. By contrast, a system of averages can lead to distortions in the gasoline versus naphtha spread if the distribution of deals done for gasoline and naphtha differs over the averaging period. Thus if gasoline trades actively at the beginning of the assessment period and naphtha trades actively at the end of the assessment period in a rising market, the assessed spread value resulting from an averaging process will not be reflective of actual market value. This distortion can arise even if the value of spread trades in their own right has remained constant. The MOC approach drastically reduces the possibility of such distortions.

Assessments reflect typical loading and delivery schedules for each market assessed. The standard loading and delivery windows are specified under each data code.

Market structure, such as backwardation and contango, is also factored into the Platts assessment process. If a company offers a cargo loading 15 days forward, the offer may provide market information for the Platts assessment for cargoes loading 15 days forward. Platts would still need to assess days 16 through 30 (in a 15–30 day market) and publish an assessment that reflects market value 15–30 days forward ahead of the day of assessment.

Assessment parameters
Platts cargo assessments generally reflect bids/offers and transactions for loading/delivery 10 to 25 days from the day of publication. For example, on October 1 Platts CIF cargo assessments would reflect cargoes for delivery between October 11 and October 26. Platts assessments consider bids, offers and transactions for loading 3 to 15 days from the day of publication on Mondays and Tuesdays. For example on October 1, Platts barge assessments would reflect barges loading between October 4 and October 16. A 5- to 15-day window is reflected on Wednesdays, Thursdays and Fridays.

Typically, Platts will take into consideration bids and offers made in 5-day loading or delivery windows, inclusive of the first and fifth day. For instance on October 1, Platts would consider bids and offers made starting with October 11-15 and ending with October 22-26.

Please note that a bid and offer made for October 20-25 actually has a six-day window. A fully representative bid or offer would need to be October 20-24 or October 21-25.

Around periods of public holidays, Platts may review the layoffs and periods reflected in its assessments, and would notify the market in advance of any changes.

Time gradient
Platts is very stringent in following timings for loading or delivery due to the variability in market value across time. This variability increases as the backwardation or contango in the markets increases.

It is not uncommon in times of tight supply for the backwardation to be over $15.00/mt per month or roughly the equivalent of $0.50/mt per day. This means that cargoes loading one week apart can vary in price by close to $3.50/mt, or possibly more, depending on the steepness of the price curve. Thus it is extremely important for Platts to follow pricing windows very methodically.

Platts factors in the backwardation/contango and reflects its impact on the published assessment. The assessment reflects the value of the commodity normalized to the center of the loading/delivery window. In a contango market, the excess of prompt barrels causes the front period to be significantly cheaper than barrels available at the end of the window. In a backwardated market the tightness of supply causes the prompter barrels to be at a higher price than barrels available at the end of the window.

Platts methodology eliminates any arbitrary movement in assessments caused simply by the different loading/delivery ranges traded. By normalizing prices to the mid-point of a clearly defined date range, the consistency of prices is maintained. The day-to-day changes in the price assessments therefore reflect an actual price move in the value of the commodity, rather than an artificial change because a cargo happens to be loading/delivering in the front period of the window rather than the back period, or vice versa.

The date ranges reflected by Platts reflect the prevailing trading practices in the European region. By not taking very prompt days into consideration, transactions reflecting distressed prices are excluded. The definition of this period varies according to specific markets.

Determination of backwardation or contango
Platts assessments reflect fair market value and therefore take into consideration backwardation and contango. Where indications are on differing date ranges, a calculation is made to determine the value the market is assigning for the difference between loading dates.

In calculating this time gradient, the prices of tradable instruments, including derivatives such as futures and swaps, may be used.

Typical calculations include a determination made for the difference in price over a month; a granular value is then calculated from this for each day.

The three main factors used in the European products market for price determination are:

- Outright price
- Premiums
- Derivatives

Outright price
The ultimate question in the mind of an end-user, producer, refiner, trader or broker is price. Outright prices are the simple statement of a
price at which something can be bought or sold, with the entire value stated — for example, an offer of a cargo of naphtha at $400/mt. Price in turn determines expense, refining margin, profit, loss, etc. The spot market trades actively on an outright price basis and a floating price basis. Platts takes both into account in its assessments. Platts will publish activity on both a fixed and floating basis.

**Prestium/discount**

Many transactions are carried out in relation to a benchmark. In this case a differential, also known as a premium/discount is generated. Premiums/discounts can arise if the quality, volumes or loading times for a given transaction differ from the benchmark. In addition, floating price transactions are done in relation to assessments that will be published in the future — for example, a bid for a cargo of naphtha at $10/mt above the Platts CIF NWE naphtha assessment, as published immediately before, during and after delivery of the cargo.

Premiums will usually rise when the market’s backwardation steepens, and the steeper the curve, the greater the premium. In a contango situation, premiums will have a tendency to turn into discounts.

**Derivatives**

Derivatives are a major determinant in price. Derivatives trade freely in an over the counter market and can trade at any time. Paper markets are very reactive and may provide market participants with timely information on market conditions. Derivatives can react to arbitrage conditions or movements in overseas markets as well as local conditions.

Derivatives are risk-management tools. Derivatives allow companies to adapt their price exposure because they enable market participants to transform floating prices to fixed or fixed to floating. Derivatives are also used as a speculative tool. Derivative market values and indications are carried in real-time on Platts Global Alert.

Buyers and sellers may show buying and selling interest for all derivatives assessed by Platts through MOC processes in the same way as is done in physical markets.

**The spot market**

These three factors — outright price, premiums and paper — converge in a spot price. Platts may use all three in its assessments.

For instance, if a physical fuel oil cargo trades at $250.00/mt for a 30,000 metric ton parcel loading 15-19 days forward FOB NWE, this trade gives a direct indication of market conditions. In the absence of outright prices, derivatives and prevailing premiums/discounts may be used in the assessments.

For example, if a jet cargo CIF NWE trades at a premium of $30.00/mt over November ICE gasoil futures, then this can be an indication of value in the spot market when combined with the value of the underlying derivative. If the gasoil November futures contract is trading at $350.00/mt then the price of the jet cargo is $380.00/mt.

If a jet cargo loading in November trades at a premium of $2.00/mt over Platts assessments in November, then Platts would determine the outright value of this trade in conjunction with an assessment of the associated November derivative contract.

**PART IV: PLATTS EDITORIAL STANDARDS**

All Platts employees must adhere to the S&P Global Code of Business Ethics (COBE), which has to be signed annually. The COBE reflects S&P Global’s commitment to integrity, honesty and acting in good faith in all its dealings.

In addition, Platts requires that all employees attest annually that they do not have any personal relationships or personal financial interests that may influence or be perceived to influence or interfere with their ability to perform their jobs in an objective, impartial and effective manner.

Market reporters and editors are mandated to ensure adherence to published methodologies as well as internal standards that require accurate records are kept in order to document their work.

Platts has a Compliance function that is independent of the editorial group. The Compliance team is responsible for ensuring the quality and adherence to Platts policies, standards, processes and procedures. The Compliance team conduct regular assessments of editorial operations, including checks for adherence to published methodologies.

S&P Global’s internal auditor, an independent group that reports directly to the parent company’s board of directors, reviews the Platts risk assessment programs.

**PART V: CORRECTIONS**

Platts is committed to promptly correcting any material errors. When corrections are made, they are limited to corrections to data that was available when the index or assessment was calculated.

**PART VI: REQUESTS FOR CLARIFICATIONS OF DATA AND COMPLAINTS**

Platts strives to provide critical information of the highest standards, to facilitate greater transparency and efficiency in physical commodity markets.

Platts customers raise questions about our methodologies and the approach we take in our price assessments, proposed methodology changes and other editorial decisions in relation to our price assessments. These interactions are strongly valued by Platts and we encourage dialog concerning any questions a customer or market stakeholder may have.

However, Platts recognizes that occasionally customers may not be satisfied with responses received or the services provided by Platts and wish to escalate matters. Full information about how to contact Platts to request clarification around an assessment, or make a complaint, is available on our website, at: http://www.platts.com/ContactUs/Complaints.
PART VII: DEFINITIONS OF THE TRADING LOCATIONS FOR WHICH PLATTS PUBLISHES DAILY INDEXES OR ASSESSMENTS

The following specifications guide contains the primary specifications and methodologies for Platts refined oil products assessments throughout Europe and Africa. The various components of this guide are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification issues.

This methodology is current at the time of publication. Platts may issue further updates and enhancements to this methodology and will announce these to subscribers through its usual publications of record. Such updates will be included in the next version of the methodology. Platts editorial staff and managers will usually be ready to provide guidance when assessment issues require clarification.

Shipping considerations

Bids: For the cargo assessment processes bids may be expressed with a specific location. Bids with excessive limitations – whether expressed or implied – may be deemed atypical and not considered for assessment purposes.

The name of the buyer and the location chosen set the conditions for any potential counterparty considering trading. The implied set conditions for a CIF bid include:

<table>
<thead>
<tr>
<th>Up front conditions</th>
<th>Conditions to be met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the buyer</td>
<td>Seller must declare its name at least 3 relevant oil majors.</td>
</tr>
<tr>
<td>Volume</td>
<td>Volume delivered must match volume requested plus/minus normal operational tolerances (in cargos this tolerance is commonly ±10% and in barges 5%; tolerance is usually specified at time of bid, offer or trade)</td>
</tr>
<tr>
<td>Port</td>
<td>Ship must meet physical limitations of port, e.g., draft, beam, etc. Ship must also meet conditions set by country of destination.</td>
</tr>
</tbody>
</table>

Offers: Offers may be made into a specific location or to meet a broad area. CIF offers may be made with a named or unnamed ship.

<table>
<thead>
<tr>
<th>Up front conditions</th>
<th>Conditions to be met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Ship</td>
<td>Buyer to determine if ship is acceptable to its vetting department</td>
</tr>
<tr>
<td>Unnamed ship</td>
<td>Seller has the responsibility to declare its commitment to meet either the vetting requirement of any buyer or conversely to declare up front how many ships vettings the seller is confident the ship will meet. Platts standard requires a seller name at least 3 relevant oil majors.</td>
</tr>
</tbody>
</table>

Please note that offers made with ships that have restrictions limiting the number of potential buyers would be considered atypical and not used in the assessment process.

Platts will also monitor vetting to ensure that ships are not rejected because of commercial considerations but only because of internal and consistently applied company standards.

Cargo Nomination Procedure

In all European CIF refined oil product cargo bids, offers and transactions, Platts guidelines require that the seller should narrow the five day delivery range to a three day delivery range by the earliest of five clear calendar or three clear working days before the first day of the narrowed delivery range, whichever falls sooner. Platts also expects the seller to nominate the performing vessel by the earliest of either five clear calendar or three clear working days. For CIF Mediterranean gasoil cargo nominations, the vessel nomination and the narrowing of the delivery range should be made by the earliest of seven clear calendar or five clear working days before the first day of the narrowed delivery range, whichever falls sooner. Platts reflects cargoes which stipulate delivery range should be made by the earliest of seven clear calendar or five clear working days before the first day of the narrowed delivery range, whichever falls sooner. Platts also expects the seller to nominate the performing vessel by the earliest of five clear calendar or three clear working days before the first day of the narrowed delivery range, whichever falls sooner. Platts also expects the seller to nominate the performing vessel by the earliest of either five clear calendar or three clear working days. For CIF Mediterranean gasoil cargo nominations, the vessel nomination and the narrowing of the delivery range should be made by the earliest of seven clear calendar or five clear working days before the first day of the narrowed delivery range, whichever falls sooner. Platts also expects the seller to nominate the performing vessel by the earliest of either five clear calendar or three clear working days. For CIF Mediterranean gasoil cargo nominations, the vessel nomination and the narrowing of the delivery range should be made by the earliest of seven clear calendar or five clear working days before the first day of the narrowed delivery range, whichever falls sooner.

Platts will also monitor vetting to ensure that ships are not rejected because of commercial considerations but only because of internal and consistently applied company standards.

CIF transactions

A CIF buyer has the right to request a deviation of the ship to another port, provided the ship-owner has granted, or has the ability to grant, the deviation to the charterer. Any incremental expenses associated with the deviation are borne by the buyer as he/she is initiating the request for the deviation.

All charter party options should be passed from a seller to the buyer in the form that they exist in the original Charter Party contract. Charges incurred because of the deviation must be transparent and be granted at cost and in line with normal market practices. The seller should not impose a fee for passing the Charter Party (CP) options.

Ship-to-ship transfers

Platts CIF refined product cargo assessments in Northwest Europe and in the Mediterranean reflect offers where the seller has the option to make final delivery on a vessel that had received its cargo on a ship-to-ship basis.

Should the seller elect to deliver a CIF cargo that has loaded on a ship-to-ship basis, the binding quantity and quality would be established on a ship’s composite basis in the final delivering vessel. The seller may not unreasonably withhold a buyer’s request for title transfer after the separation of the vessels involved in the ship-to-ship transfer.

Furthermore, Platts reflects offers which grant the buyer the option to request delivery into a vessel, rather than into a port. Under these
circumstances the quantity and quality as title and risk will pass in line with typical practices in CIF transactions.

**Location**

Platts publishes assessments for several locations on a FOB and CIF basis. The location parameters for each assessment are published in Section VII of this guide.

**Barges**

For FOB North West Europe barges across all products, the buyer must give the seller 48 clear working hours' notice of the date of loading required.

Platts FOB barge assessments reflect specified loading locations. Platts may publish bids, offers and trades outside of these locations, if appropriate, and these may be normalized to the standard loading location.

Platts reflects barge deals where the buyer has the right to request alternative loading mechanisms after the seller nominates a loading terminal. These alternative loading terms may include pumpover, inter tank transfer or cargo loading. The seller should not unreasonably withhold these requests and any alternative loading basis should be granted at operational cost only to the buyer.

Platts FOB barge assessments, basis ARA, reflect bids and offers where the buyer commits to load the contractual volumes as per the agreed volume at the time of trade, where the quantity delivered to a buyer is measured in line with the typical practice established at the nominated terminal at the loading port. Platts understands the typical method of measuring quantity in the ARA barge market uses the terminal's shore tank results, where quantity is metered between the shore tank and the receiving barge's flange. Platts assessment processes reflect these standard processes and conventions.

Any potential for short loading -beyond the normal operational tolerance levels- for logistical reasons, such as water level issues on inland waterways, must be agreed with the seller prior to the commencement of loading.

The seller retains the option on whether to accept or reject the buyers request to short load. Any buyer who wishes to retain an option to short load barges due to water level concerns on inland waterways must express this in their bid. Bids with such stipulations will be considered atypical and may be subject to normalization.
**Propane CIF Large Cargo**: This assessment reflects the value of refrigerated cargoes for delivery 10-25 days from date of publication, with values normalized to reflect the mean value of the delivery period. The assessment reflects full or part-cargoes of between 8,500-23,100 mt, meeting Braefoot Bay commercial propane specifications. The assessment is CIF basis Flushing, but deliveries to other ports in Northwest Europe will be reflected. Bids, offers and transactions into relevant Scandinavian ports may also be considered in the assessment. All deliveries to ports other than Flushing may be normalized to this location. Previously, Platts described this assessment as Propane CIF Large Cargoes or Propane 7000+ MT. Effective January 3, 2017, Platts has standardized this to Propane CIF NWE Large Cargo.

**Propane CIF Large Cargoes Monthly Rolling Average**: This value reflects the month-to-date average of Platts daily Propane CIF Large Cargo assessments. The average takes each of the daily data points published during the month to date, and divides by the number of working days there have been during the month.

**Propane FOB NWE Seagoing**: This assessment reflects the value of pressurized vessels loading 5-15 days from date of publication, with values normalized to the mean value of the loading period. The assessment reflects coasters ex-refinery/storage with full cargoes of between 1,000-3,600 mt with a minimum content of 93% propane and a maximum of 30% olefins (including both field and refinery grades). The assessment is FOB basis Tees, but loadings from other ports in Northwest Europe will be reflected. Bids, offers and transactions from relevant Scandinavian ports may also be considered in the assessment. Previously, Platts described this assessment as Propane FOB Seagoing. Effective January 3, 2017, Platts has standardized this to Propane CIF NWE Large Cargo.

**Propane FOB Cargoes**:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Code</th>
<th>Mavg</th>
<th>Pavg</th>
<th>Wavg</th>
<th>Contract Basis</th>
<th>Location</th>
<th>Delivery Period</th>
<th>Min Size</th>
<th>Max Size</th>
<th>Currency</th>
<th>Uom</th>
<th>Conv To Uom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane CIF NWE 1-3kt</td>
<td>PMAA00</td>
<td>PMAED03</td>
<td>-</td>
<td>AABEX00</td>
<td>CIF NWE</td>
<td>5-15 days forward</td>
<td>1,000</td>
<td>3,600</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
<td></td>
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<tr>
<td>Propane CIF NWE Large Cargo</td>
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<td>AABEX00</td>
<td>CIF NWE</td>
<td>10-25 days forward</td>
<td>8,500</td>
<td>23,100</td>
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<tr>
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<td>AABFB00</td>
<td>CIF NWE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
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<td>Propane FOB NWE Seagoing</td>
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<td>PMAEB03</td>
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<td>AABEX00</td>
<td>CIF NWE</td>
<td>5-15 days forward</td>
<td>1,000</td>
<td>3,600</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
<td></td>
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<tr>
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<td>-</td>
<td>-</td>
<td>CIF NWE</td>
<td>3-10 days forward</td>
<td>420</td>
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<td>500</td>
<td>US $</td>
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<td>500</td>
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<td>metric ton</td>
<td>5.21 cts/gal</td>
<td></td>
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<tr>
<td>Propane ARA CIF Large Swap Gr01</td>
<td>PMLH00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>CIF ARA</td>
<td>3-10 days forward</td>
<td>20</td>
<td>500</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
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<tr>
<td>Propane FOB ARA</td>
<td>PMAS00</td>
<td>PMLB03</td>
<td>-</td>
<td>-</td>
<td>CIF ARA</td>
<td>3-10 days forward</td>
<td>20</td>
<td>500</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
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<tr>
<td>Propane FOB ARA</td>
<td>PMABH00</td>
<td>PMLC03</td>
<td>-</td>
<td>AABEC00</td>
<td>FCA ARA</td>
<td>3-10 days forward</td>
<td>20</td>
<td>500</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
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<tr>
<td>Propane W Med CIF 7000+ MT</td>
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<td>PMLD03</td>
<td>-</td>
<td>AABED00</td>
<td>CIF West Med (basis Lavera)</td>
<td>10-25 days forward</td>
<td>7,000</td>
<td>+</td>
<td>US $</td>
<td>metric ton</td>
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<tr>
<td>Propane W Med CIF 1000-3000 MT</td>
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<td>PMLD03</td>
<td>-</td>
<td>AABED00</td>
<td>CIF West Med (basis Lavera)</td>
<td>5-15 days forward</td>
<td>3,000</td>
<td>US $</td>
<td>metric ton</td>
<td>5.21 cts/gal</td>
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<td></td>
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<tr>
<td>Propane W Med FOB Ex-Ref/Stor</td>
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<td>PMLD03</td>
<td>-</td>
<td>AABED00</td>
<td>FCA West Med (basis Lavera)</td>
<td>5-15 days forward</td>
<td>20</td>
<td>500</td>
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<tr>
<td>Butane CIF NWE 1-3kt</td>
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<td>5-15 days forward</td>
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<td>3,600</td>
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<td>metric ton</td>
<td>4.53 cts/gal</td>
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<tr>
<td>Butane CIF NWE Large Cargo</td>
<td>PMAK00</td>
<td>PMLK03</td>
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<td>AABES00</td>
<td>CIF NWE</td>
<td>10-25 days forward</td>
<td>8,000</td>
<td>12,000</td>
<td>US $</td>
<td>metric ton</td>
<td>4.53 cts/gal</td>
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</tr>
<tr>
<td>Butane FOB NWE Seagoing</td>
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<td>PMLC03</td>
<td>-</td>
<td>AABEO00</td>
<td>FOB NWE</td>
<td>5-15 days forward</td>
<td>1,800</td>
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<td>metric ton</td>
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<tr>
<td>Butane FOB ARA</td>
<td>PMAC00</td>
<td>PMLD03</td>
<td>-</td>
<td>AABEP00</td>
<td>FOB ARA</td>
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<td>1,100</td>
<td>US $</td>
<td>metric ton</td>
<td>4.53 cts/gal</td>
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<tr>
<td>Butane FCA ARA</td>
<td>PMLB00</td>
<td>PMLD03</td>
<td>-</td>
<td>AABEQ00</td>
<td>FOB ARA</td>
<td>3-10 days forward</td>
<td>20</td>
<td>500</td>
<td>US $</td>
<td>metric ton</td>
<td>4.53 cts/gal</td>
<td></td>
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<tr>
<td>Butane W Med FOB Coaster</td>
<td>PMAL00</td>
<td>PMLD03</td>
<td>-</td>
<td>AABET00</td>
<td>FOB West Med (basis Lavera)</td>
<td>5-15 days forward</td>
<td>1,600</td>
<td>+</td>
<td>US $</td>
<td>metric ton</td>
<td>4.53 cts/gal</td>
<td></td>
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</tbody>
</table>
Propane FOB Seagoing Monthly Rolling Average: This value reflects the month-to-date average of Platts daily Propane FOB Seagoing assessments. The average takes each of the daily data points published during the month to date, and divides by the number of working days there have been during the month.

Propane FOB ARA: This assessment reflects the value of pressurized vessels loading 3-10 days from date of publication, with values normalized to the mean value of the loading period. The assessment reflects barges ex-refinery/storage with full cargoes of between 420-1,100 mt with a minimum content of 95% propane and a maximum of 30% olefins, (including both field and refinery grades). The assessment is FOB basis Amsterdam-Rotterdam-Antwerp.

Propane W Med CIF 7000+ MT: This assessment reflects the value of refrigerated cargoes for delivery 10-25 days from date of publication, with values normalized to the mean value of the delivery period. The assessment reflects full cargoes of at least 7,000 mt, meeting Sonatrach commercial propane specifications. The assessment is CIF basis Lavera, but deliveries into other ports in the West-Mediterranean will be reflected. Trades basis other locations are normalized to a Lavera basis by analyzing freight costs.

Propane W Med FCA Ex-Ref/Stor: This assessment reflects the value of pressurized vessels loading 3-10 days from date of publication, with values normalized to the mean value of the loading period. The assessment reflects rail-cars and trucks ex-refinery/storage with parcels of between 20-500 mt with a minimum content of 95% propane and a maximum of 30% olefins, (including both field and refinery grades). The assessment reflects FCA basis Lavera.

Butane FOB ARA: This assessment reflects the value of pressurized vessels loading 3-10 days from date of publication, with values normalized to the mean value of the loading period. The assessment reflects barges ex-refinery/storage with full or part-cargoes of between 1,800-6,000 mt of mixed butane with a maximum content of 85% normal butane, 49% isobutane and 30% olefins, (including both field and refinery grades). The assessment reflects FOB loadings in Northwest Europe. Bids, offers and transactions from relevant Scandinavian ports may be considered in the assessment. Previously, Platts described this assessment as Butane FOB Seagoing. Effective January, 3, 2017, Platts has standardized this to Butane FOB NWE Seagoing.

Butane FCA ARA: This assessment reflects the value of pressurized material loading 3-10 days from date of publication, with values normalized to the mean value of the loading period. The assessment reflects rail-cars and trucks ex-refinery/storage with parcels of between 20-500 mt with a maximum content of 85% normal butane, 49% isobutane and 10% olefins, (including both field and refinery grades). The assessment is FOB basis Seagoing.

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In the AR gasoline barge market, on March 17, 2014 Platts started reflecting summer grades of gasoline on a pro-rated basis, with March 21 being the first day on which summer gasoline could be bid. March 24 was the last day on which winter could be offered. The last day on which winter was reflected in the assessment was March 26.

Operational Tolerance: Platts reflects bids, offers and trades that limit a counterparty’s price exposure to operational tolerance. Operational tolerance is typically limited to plus or minus 10% of the transacted size for cargoes and 5% for barges. As an example, a barge size of 3,000 mt would have a maximum operational tolerance of plus or minus 150 mt. When pricing on a floating price basis Platts reflects CIF/FOB cargoes where the operational tolerance prices after the completion of discharge/issuance of bill of lading, and barges where the operational tolerance prices after the issuance of the bill of lading.

Premium gasoline 10PPM Cargoes FOB Med: Mediterranean unleaded cargo assessments represent EN 228 95 Research Octane Number (RON) meeting Italian, French, and Spanish specifications. The RON is 95 and the Motor Octane Number (MON) is 85. The specific gravity for Mediterranean assessments is 0.755 kg/l. Aromatics limit is 35% maximum. Cargo assessments reflect parcels of 25,000 to 30,000 mt each, though FOB cargoes of up to 33,000 mt may be considered. The assessment reflects cargoes loading FOB basis Santa Panagia Bay or Sarroch. Loadings taking place in other Med locations may be considered in the MOC assessment process and normalized back to reflect value basis Santa Panagia Bay. Platts also reflects bids, offers and trades into the North Africa port of Tangier Med, Morocco, in its Mediterranean cargo assessments.

Platts also reflects sales of gasoline that occur across the berth at jetties within the Platts FOB Med gasoline assessment. Should the seller elect to deliver a cargo that has loaded across the jetty, the binding quantity and quality would be established on a ship’s composite basis in the final delivering vessel. The assessment reflects material for loading 10-25 days from date of publication, with value normalized to reflect the mean value of the delivery period.

The reference maximum Reid Vapor Pressure [RVP] for Platts winter specification 10 ppm gasoline FOB and CIF Mediterranean cargo

<table>
<thead>
<tr>
<th>GASOLINE</th>
<th>CODE</th>
<th>Mavg</th>
<th>Pavg</th>
<th>WAVG</th>
<th>CONTRACT BASIS</th>
<th>LOCATION</th>
<th>DELIVERY PERIOD</th>
<th>MIN SIZE</th>
<th>MAX SIZE</th>
<th>CURRENCY</th>
<th>UOM</th>
<th>CONV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline Prem Unleaded 10ppmS FOB Med Cargo</td>
<td>AAXZB00</td>
<td>AAXZB03</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>Med (basis Italy)</td>
<td>10-25 days forward</td>
<td>25,000</td>
<td>30,000</td>
<td>US $</td>
<td>metric ton</td>
<td>8.33</td>
</tr>
<tr>
<td>Gasoline Prem Unleaded 10ppmS CIF Med Cargo</td>
<td>AAXZB00</td>
<td>AAXZB03</td>
<td>-</td>
<td>-</td>
<td>CIF</td>
<td>Med (basis Genoa/Lavera)</td>
<td>10-25 days forward</td>
<td>25,000</td>
<td>30,000</td>
<td>US $</td>
<td>metric ton</td>
<td>8.33</td>
</tr>
<tr>
<td>Gasoline 10ppmS CIF NWE Cargo</td>
<td>AAXFQ00</td>
<td>AAXFQ03</td>
<td>-</td>
<td>-</td>
<td>CIF</td>
<td>NWE (basis Thames)</td>
<td>10-25 days forward</td>
<td>9,000</td>
<td>11,000</td>
<td>US $</td>
<td>metric ton</td>
<td>8.33</td>
</tr>
<tr>
<td>Gasoline Eurobobs FOB ARA Barge</td>
<td>AAXZB00</td>
<td>AAXZB03</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>AR</td>
<td>3-15 days forward [Monday-Tuesday]</td>
<td>1,000</td>
<td>5,000</td>
<td>US $</td>
<td>metric ton</td>
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<tr>
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<td>AAXZB00</td>
<td>AAXZB03</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>AR</td>
<td>3-15 days forward [Monday-Tuesday]</td>
<td>1,000</td>
<td>5,000</td>
<td>US $</td>
<td>metric ton</td>
<td>8.33</td>
</tr>
<tr>
<td>Gasoline Reg Unleaded 98 FOB AR Barges</td>
<td>AAXD00</td>
<td>AAXD00</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>AR</td>
<td>3-15 days forward [Monday-Tuesday]</td>
<td>1,000</td>
<td>5,000</td>
<td>US $</td>
<td>metric ton</td>
<td>8.33</td>
</tr>
<tr>
<td>Reformate FOB AR Barge</td>
<td>AAXF00</td>
<td>AAXF00</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>AR</td>
<td>3-15 days forward [Monday-Tuesday]</td>
<td>3,000</td>
<td>5,000</td>
<td>US $</td>
<td>metric ton</td>
<td>-</td>
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<tr>
<td>Reformate FOB AR Barge Eur/mt</td>
<td>AAXF00</td>
<td>AAXF00</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>AR</td>
<td>3-15 days forward [Monday-Tuesday]</td>
<td>3,000</td>
<td>5,000</td>
<td>Euro</td>
<td>metric ton</td>
<td>-</td>
</tr>
</tbody>
</table>
assessments reflects a maximum RVP of 80 kPa. For summer grade, Platts reflects a maximum of 60 kPa RVP.

**Premium gasoline 10PPM Cargoes CIF Med:** The CIF Med gasoline assessment is a freight differential to the FOB Med assessment, using the Platts cross-Med clean tanker assessment. Effective January 3, 2017 the Worldscale basket flat rate used to calculate the CIF Med assessment is $4.80/mt. The assessment reflects CIF basis Genoa/Lavera.

**Premium gasoline 10PPM Cargoes CIF NWE:** NWE cargo assessments represents EN 228 material with a maximum sulfur of 10ppm. Specific gravity is basis 0.755 kg/l. The RON is 95 and the MON is 85. The aromatics limit is 35% maximum. In line with prevailing market practices, the assessment reflects material with a maximum oxygenate content of 0.9% by weight. Platts also reflects material with a maximum evaporation (E70) of 43% in winter specification material and 41% in summer specification material. Offers of material with a higher evaporation (E70) level should state the maximum limit in the offer. Gasoline 10ppm CIF cargo assessments reflects 10,000 mt. Larger cargo sizes may be considered in the MOC assessment process and normalized to reflect a 10,000 mt standard size. The assessment is basis Thames with normal charterparty options within NWE. The assessment reflects material for delivery 10-25 days from date of publication, with value normalized to reflect the mean value of the delivery period. In the absence of liquidity, Platts may consider differentials to more liquid gasoline markets, such as Eurobob or Premium Unleaded 10 ppm barges, as well as prevailing Cross UK Continent freight rates.

**West Africa Gasoline FOB Northwest Europe:** The assessment reflects gasoline with a maximum of 1,000ppm sulfur, minimum 91 RON, a maximum RVP of 9 Pounds per Square Inch (PSI) and a maximum density of 0.735 kg/l at 60 degrees Fahrenheit. In its assessment process, Platts will publish bids and offers for other merchantable gasoline grades appropriate for West African delivery, and normalize these back to the reference specification. The FOB Northwest European assessment is basis FOB Amsterdam, with bids and offers from other locations in Northwest Europe normalized back to Amsterdam.

The FOB NWE cargo assessment represents cargoes of 34,000 mt plus/minus 10% operational tolerance with other cargo sizes also considered for assessment purposes but normalized back to the reference cargo size.

**West Africa Gasoline CIF West Africa:** The CIF West Africa assessment is calculated as a freight net-forward from the FOB Northwest European assessment, using a basket of two Worldscale flat rates; Amsterdam-Lome and Amsterdam-Lagos. The 2017 Worldscale flat rate used to calculate the net-forward formula for the CIF assessment is $11.35/mt. This CIF assessment is calculated by multiplying the Worldscale flat rate by the Platts daily tanker rate assessment for UKC-West Africa 37,000 mt cargoes (PFAMH00).

**Barges:** The assessment reflects material for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days from date of publication, with value normalized to reflect the mean value of the loading period. Gasoline barges reflect a basis location of AR (Amsterdam/Rotterdam). Any transactions occurring at Antwerp are reflected and normalized. Normalization will include an incremental freight differential basis into the main consuming area, which is typically Germany.

**Eurobob Gasoline Barges FOB AR:** The barge assessment represents a blendstock that after the addition of 4.8% maximum of ethanol meets EN 228 standard with a maximum sulfur content of 10ppm, specific gravity of 0.755 kg/l. The RON is 95 and the MON is 85. The aromatics limit is 35% maximum, and a maximum oxygenate content of 0.9% by weight. Barge assessments reflect parcels of 1,000 to 5,000 mt.

**Premium Gasoline 10PPM Barges FOB AR:** The barge assessment represents EN 228 material with a 95 RON, 85 MON and a specific gravity basis of 0.755 kg/l. The maximum sulfur is 10ppm. Aromatics limit is 35% max. Barge assessments reflect parcels of 1,000 to 5,000 mt each.

**98 RON Gasoline 10PPM Barges FOB AR:** The NWE barge assessment represents EN 228 material with maximum sulfur 10ppm, specific gravity of 0.755 Kg/L. The RON is 98 and the MON is 88. Aromatics limit is 35% max. Barge assessments reflect parcels of 1,000 to 5,000 mt each. Because this market is illiquid, it is generally established through a differential to Eurobob barges.

**Reformate Barges FOB AR:** The barge assessment represents material with a minimum 99 RON, minimum 0.810 kg/l density, maximum 3 ppm sulfur, maximum 38 kPa Vapour Pressure, maximum 2% Benzene and minimum 65% Aromatics. Bids and offers for different merchantable grades of reformate will be published in the Platts MOC assessment process and may be normalized to reflect the reference specification. The barge assessment reflects parcels of 3,000-5,000 mt each.
NAPHTHA

Naphtha Cargoes CIF NWE: The CIF NWE cargo assessment reflects open specification material with a minimum of 65% paraffin content and a typical specific gravity of 0.69 to 0.735 kg/l. Other qualities may be taken into account when traded but these would be normalized to Platts typical specifications. Likewise, naphtha with larger than normal mercury levels may not be considered in the assessment process. The maximum mercury considered in the assessment is 5 parts per billion. Platts also reflects material with a maximum MTBE content of 50ppm and a total oxygenate content of 100ppm.

The physical assessment reflects four cargo sizes of 12,500 mt, 24,000 to 28,000 mt, 28,000 to 32,000 mt and 32,000 to 36,000 mt, full or part-cargo. The most competitive (ie lowest value) of the four cargo sizes will be reflected in the final published CIF NWE naphtha cargo assessment. The assessment reflects naphtha for delivery 10-25 days forward from date of publication, with value reflecting the mean value of the delivery period. By reflecting four commonly traded cargo sizes, Platts seeks to ensure its assessment reflects a broad cross-section of Europe’s evolving spot market.

OPERATIONAL TOLERANCE (LARGER CARGOES): For 24,000-28,000 mt, 28,000-32,000 mt and 32,000-36,000 mt cargoes, Platts reflects European naphtha cargo bids, offers and transactions where the seller commits to deliver on a CIF basis, but with the quantity operational tolerance is plus or minus 10%. Platts will continue to review pricing terms reflected in the 12,500 mt transactional activity considered in the assessment process, but proposes no immediate change to these standards.

OPERATIONAL TOLERANCE (SMALLER CARGOES): For cargoes of 12,500 mt, Platts will review European naphtha cargo bids, offers and trades where the volume operational tolerance is plus or minus 10%. Platts will continue to review pricing terms reflected in the 12,500 mt transactional activity considered in the assessment process, but proposes no immediate change to these standards.

The assessment reflects cargoes delivered CIF basis Rotterdam. Where part-cargoes are delivered CIF basis Rotterdam, it is assumed that the buyer should not be disadvantaged by the seller’s decision to not deliver a full cargo. Therefore, Platts reflects deals in which charter-party and demurrage paid by the buyer is on a pro-rata basis to normal destinations in NWE, even when these are outside the ARA range. Platts reflects bids and offers with typical charterparty options including ARA, the Le Havre-Hamburg range and the East Coast UK.

Platts only reflects offers of Tuapse-loading naphtha cargoes when the seller commits to deliver on a CIF basis, but with the quantity established by means of a ship’s composite at disport. Platts European naphtha assessments include bids, offers and transactions where the seller has committed to meeting the receivers’ reasonable shipping and vetting requirements. The assessments also reflect bids, offers and transactions where the buyer requests delivery into a ship, provided the vessel is of widespread acceptability.

Platts assessments reflect trades where sellers may substitute vessels nominated to buyers up until one clear working day before the first day of the narrowed three-day delivery period. As an example, for a laycan narrowed by a seller to Wednesday, June 26 until Friday, June 28, a seller would be permitted to substitute the vessel up until the close of business on Monday, June 24. Platts also expects parties to be reasonable when exceptional circumstances may require later substitutions, and also in managing buyers’ requests to change discharge orders. A nominated cargo need solely meet the specifications defined in Platts methodology and those expressed by the market maker in MOC. Re-nominated vessels need to be able to meet the logistical requirements of the originally agreed discharge port.

PLATTS CIF NWE NAPHTHA CARGO SPECS

| Specific Gravity at 15 C | 0.735 g/ml | max 0.735 g/ml |
| Rend Vapor Pressure | 12.5 psi | min 12.5 psi |
| Colour | | max 12.5 psi |
| Initial Boiling Point | min +20 Saybolt | min +20 Saybolt |
| Final Boiling Point | min 30 deg C | min 30 deg C |
| Paraffins pct vol | max 160 deg C | max 160 deg C |
| Olefins pct vol | max 65 % | max 65 % |
| Naphthenes + aromatics pct vol | max 1 % | max 1 % |
| Sulfer | max 500 ppm | max 500 ppm |
| Lead | max 10 ppm | max 10 ppm |
| Total Chlorides | max 10 ppm | max 10 ppm |
| MTBE | max 50 ppm | max 50 ppm |
| Total Oxygenate | max 100 ppm | max 100 ppm |
| Mercury | max 5 ppb | max 5 ppb |
| Mercaptan sulphur | to be reported | to be reported |

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Platts CIF Northwest European naphtha cargo assessments reflect bids, offers and transactions where the vessel is not guaranteed to have an inert gas system (IGS) if the material is delivered in a coaster vessel, typically of 12.5kt. Platts has reviewed market practices in the region where such vessels are delivered. In those situations where the buyer requires a vessel with an IGS facility, that buyer should specify it in the bid or declare the delivery port which requires an IGS vessel.

**Naphtha Cargoes FOB Med:** The FOB MED cargo assessment includes both full range and paraffinic grades, with value normalized to reflect 65% minimum paraffin. The assessment reflects 27,500 mt cargoes, loading FOB basis Alexandria, for loading 10-25 days forward from the date of publication, with value reflecting the mean value of the delivery period. This assessment is established as a netback from the CIF Northwest Europe assessment. Effective January 3, 2017 the Worldscale basket flat rate used to calculate FOB Med naphtha is $8.58/mt. Rotterdam port fees are $0.83/mt. The actual rate applied to the netback will fluctuate daily based on changes in Platts UKC-Med freight assessments for 27,500 mt naphtha cargoes, applied against the $9.41/mt rate.

**Naphtha Cargoes CIF Med:** The CIF MED cargo assessment includes both full range and paraffinic grades, with value normalized to reflect 65% minimum paraffin. The assessment reflects 27,500 mt cargoes, delivered CIF basis Lavera, for delivery 10-25 days from date of publication, with value reflecting the mean value of the delivery period. This assessment is established as a netback from the FOB Med naphtha assessment, based on the freight value between Alexandria and Lavera. Effective January 3, 2017, the Worldscale flat rate used to calculate the CIF MED Naphtha assessment became $5.96/mt based on published freight value between Alexandria and Lavera using Platts cross-Med clean tanker naphtha assessments.

**Naphtha Barges FOB ARA:** Barge naphtha assessments reflect the value of open specification material, with value normalized to reflect 65% minimum paraffin. Barge assessments reflect parcels of 1,000 to 5,000 mt each, loading FOB basis Amsterdam-Rotterdam-Antwerp, basis Rotterdam. Barge assessments reflect parcels for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward from the date of publication. Because of illiquidity in this market, the barge assessment is established through a fixed $4/mt differential to the CIF NWE cargo assessment.
JET FUEL

Platts European jet fuel assessments reflect standard commercial Jet-A1 specifications, as defined by UK Ministry of Defence in DEFSTAN 91-91 and the Joint Fuelling System Checklist. The UK Ministry of Defence has updated DEFSTAN 91-91 periodically and Platts reflects the latest issue. Latest DEFSTAN specifications at the time of this guide’s publication are as follows: sulfur is 0.3% maximum, specific gravity is 0.775-0.840 kg/l, flash point is 38 degrees celsius minimum, freeze point is minus 47 degrees celsius maximum. The Joint Fuelling System Checklist requires jet fuel to meet the more stringent requirements of DEFSTAN 91-91 and the American Society for Testing & Materials’, Standard Specification D 1655-04a. Operational Tolerance:

Jet barges are basis FOB Rotterdam. Any transactions occurring at other loading ports in NWE are typically normalized back to Rotterdam. Platts considers bids and offers from Flushing, Amsterdam, Rotterdam, Antwerp and Ghent. Barge bids for one location only may not be considered for assessment. Operational Tolerance:

Platts reflects bids, offers and trades that are diverse, no single base location is reflected. Deliveries into Scandinavia, including Copenhagen are not considered, however. Offers are assumed to carry a normal range of charterparty options within NWE. The assessment reflects material for delivery 10-25 days from date of publication, with value reflecting the mean value of the delivery period. Platts has reflected ex-duty cargoes of jet fuel in its Jet CIF Northwest Europe Cargo assessment since January 1, 2014. Platts assessments will reflect merchantable quality jet fuel regardless of origin. Prior to January 1, 2014, Platts reflected market conventions in its Jet CIF Northwest European physical cargo assessment, where jet fuel cargoes were expected to be “EU-qualified,” free from exposure to import taxes.

Jet Cargoes CIF NWE: Cargo assessments reflect standard tradable parcels. Typical cargo sizes of 25,000 to 45,000 mt are reflected. Platts takes into account spot deliveries made in full or part cargoes at seller’s option. The assessment is normalized to 30,000 mt full or part-cargo, seller’s option, delivered basis a par port within NWE where the seller guarantees lay-time of 36 plus 6 hours to the buyer of each parcel. Bids, offers and trades into other locations will be considered, and will be normalized to reflect a par port. Par ports are typically considered to be those with open storage access and flexibility to handle a variety of cargo sizes, such as Rotterdam and Le Havre. Offers or bids basis non-par ports may be considered for assessment, but these will typically be normalized to the standard. Bids requiring a full cargo will be considered restrictive and may not be published.

Platts reflects bids and offers where the seller endeavors to deliver oil on a vessel that will fit plausible terminals and jetties within the port shown in the original bid or offer. Where the buyer needs a vessel that will fit the specific dimensions of a terminal or a jetty, the name of the terminal and/or jetty should be detailed in any bid communicated to Platts for publication. Upon performance of any resulting trade, a buyer may wish to take the vessel to a different port based on its charterparty options. In such a situation, the seller is obliged to provide a vessel fitting plausible terminals in the originally nominated port. Typically, cargoes delivered into ARA, UK and northern France are considered in the assessment. Since jet trading patterns are diverse, no single base location is reflected. Deliveries into Scandinavia, including Copenhagen are not considered, however. Offers are assumed to carry a normal range of charterparty options within NWE.

The assessment reflects material for delivery 10-25 days from date of publication, with value reflecting the mean value of the delivery period. Platts has reflected ex-duty cargoes of jet fuel in its Jet CIF Northwest Europe Cargo assessment since January 1, 2014. Platts assessments will reflect merchantable quality jet fuel regardless of origin. Prior to January 1, 2014, Platts reflected market conventions in its Jet CIF Northwest European physical cargo assessment, where jet fuel cargoes were expected to be “EU-qualified,” free from exposure to import taxes.

Jet Cargoes FOB NWE: The FOB NWE assessment is typically derived from the CIF value based on a differential representing freight costs for handy size vessels on typical routes within NWE. Platts uses the $/mt for cross UK Cont vessels carried in Platts Clean Tankerwire, rounded to the nearest $0.25/mt. This assessment reflects the value of parcels loading 10-25 days forward from the date of publication, with values reflecting the mean value of the delivery period.
Jet Barges FOB ARA: This assessment reflects parcels of 2,000-5,000 mt each, with value normalized to reflect a 2,000- to 3,000 mt range, loading basis FOB Rotterdam, 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward from date of publication, with value reflecting the mean value of the delivery period. Transactions occurring at other load ports in NWE are typically normalized to Rotterdam. Platts considers bids and offers from Rotterdam, Antwerp, Amsterdam, Ghent and Flushing. Platts Jet FOB ARA Barge assessment continues to reflect “EU-qualified” material.

Jet Fuel FOB Med: This assessment reflects the value of cargoes of 27,500 mt loading FOB Mediterranean basis Augusta, for loading 10-25 days from date of publication, with value reflecting the mean value of the delivery period. This assessment is established as a netback from the CIF Northwest European jet cargo assessment. Details of the calculation methodology for Jet Fuel FOB Med are as follows:

The calculation takes the spot Worldscale rate as published in Platts Marine Alert and Platts Clean Tankerwire, for jet fuel Med-Northwest Europe pro-rated from 30,000 mt to 27,500 mt. This total is multiplied by the flat rate Augusta-Rotterdam as defined by Worldscale, and the appropriate allowance for harbor dues at Rotterdam is then added. The result of this formula is rounded to the nearest $0.25/mt and subtracted from the mean of the CIF Northwest European jet assessment, to define the FOB Med mean.

Platts assesses the Worldscale rate for clean cargoes for the Med-Northwest Europe route. The rate is published on a daily basis in Platts Marine Alert and in the daily Clean Tankerwire. This rate is applied to determine the netback calculation of the FOB Mediterranean Jet Aviation Fuel assessment. Adjustments to the formula are made on the first working day of January each year to reflect updated Worldscale flat rates as published by Worldscale. Effective January 3, 2017 the Worldscale flat rate Augusta-Rotterdam used to calculate the netback formula for FOB Med jet fuel became $7.50/mt. Rotterdam harbor dues became $1.00/mt.

Jet Fuel CIF Med: This assessment reflects the value of cargoes of 30,000 mt delivered CIF Mediterranean, 10-25 days forward from the date of publication. This assessment is established as a netback from the CIF Northwest European jet cargo assessment, using the difference between the lump sum assessments of the Persian Gulf to Northwest Europe and Persian Gulf to the Mediterranean routes, as published in the Platts Clean Tankerwire.
ULSD

Assessment | CODE | Mavg | Pavg | Wavg | CONTRACT BASIS | LOCATION | DELIVERY PERIOD | MIN SIZE | MAX SIZE | CURRENCY | UOM | CONV
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
ULSD 10ppmS CIF NWE Cargo | AAVBG00 | - | - | - | CIF | NWE (basis ARA) | 10-25 days forward | 10,000 | 40,000 | US $ | metric ton | 7.45
ULSD 10ppmS CIF NWE Basis Le Havre Cargo | AAVBG03 | - | - | - | CIF | NWE (basis Le Havre) | 10-25 days forward | 10,000 | 40,000 | US $ | metric ton | 7.45
ULSD 10ppmS CIF NWE Basis UK Cargo | AAVBH00 | - | - | - | CIF | NWE (basis UK) | 10-25 days forward | 10,000 | 40,000 | US $ | metric ton | 7.45
ULSD 10ppmS FOB NWE Cargo | AAVBH03 | - | - | - | FOB | NWE (basis ARA) | 10-25 days forward | 10,000 | 40,000 | US $ | metric ton | 7.45
ULSD 10ppmS FOB NWE Basis Le Havre Cargo | AAVBH04 | - | - | - | FOB | NWE (basis Le Havre) | 10-25 days forward | 10,000 | 40,000 | US $ | metric ton | 7.45
ULSD 10ppmS FOB Med Cargo | AAVY200 | - | - | - | FOB | Med (basis Lavera) | 10-25 days forward | 25,000 | 30,000 | US $ | metric ton | 7.45
ULSD 10ppmS FOB Med Cargo | AAVY203 | - | - | - | FOB | Med (basis Lavera) | 10-25 days forward | 25,000 | 30,000 | US $ | metric ton | 7.45
ULSD 10ppmS FOB ARA Cargo | AAVBH00 | - | - | - | FOB | ARA (basis Rotterdam) | 3-15 days forward (Monday-Tuesday) | 1,000 | 3,000 | US $ | metric ton | 7.45

ULSD 10 ppm Cargoes CIF NWE (AAVBG00): This assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 10ppm and standard gravity in the range 0.82-0.845. The reference density is 0.845 kg/l. Bids, offers and transactions for other 10ppm grades, such as UK or German specifications, into typical CIF NWE locations will be considered in the assessment process and may be normalized to the base assessment. Typical cargo sizes of 10,000-40,000 mt are reflected. Effective from January 3, 2017, Platts normalizes to reflect 30,000 mt size plus/minus 10%. Due to an observed change in market flows, in which larger cargoes and vessels are increasingly supplying the market, and following supportive industry feedback, Platts raised the basis size of its CIF Northwest European diesel cargo assessments from 20,000 mt plus/minus 10% to the current standard. The CIF assessment reflects Amsterdam-Rotterdam-Antwerp delivery basis with typical charterparty options, including the Hamburg-Bordeaux and North Spain range, German North Sea, the German Baltic Sea, ARA, Poland, Thames, the East Coast and the South Coast of the UK. West Coast UK charterparty options may not be unreasonably withheld.

ULSD Seasonal Changes: Platts set out its schedule for changing the seasonal specification of diesel fuels in late winter and late summer, ahead of the switch from winter to summer (including intermediate where appropriate) and then summer to winter grades (again, including intermediate where appropriate). Platts intends to follow broadly similar schedules each year, but the exact dates may be varied in line with prevailing patterns of refining activity and trading liquidity. As trading and seasonal patterns change from year to year, any schedule is provisional and subject to change with only limited notice.

Trace elements of biodiesel: Platts defines non-intentionally blended trace elements of biodiesel in hydrocarbon diesel assessments as having a maximum biodiesel content of no more than 0.30%.

Clear and bright: Platts reflects ultra low sulfur diesel (ULSD) with a clear and bright aspect.

Part Cargoes: Platts CIF European ULSD assessments reflect bids, offers and trades that allow a seller to deliver oil from a part cargo provided the vessel was named at the time of sale, either as a named vessel in the offer or by hitting a bid with a named vessel. Additionally, when selling on a part cargo basis, any seller must commit to supplying the performing fuel in segregated tanks with separate BLs. The seller must also commit to discharging any additional fuel, above the contractual size, prior to discharge of the main cargo and also protect the buyer against any additional freight exposure caused by delivering on a part cargo basis. When supplying on a part cargo basis the seller must provide a vessel commensurate with typical trade patterns in that market.

Platts reflects bids and offers where the seller endeavors to deliver oil on a vessel that will fit plausible terminals and jetties within the port shown in the original bid or offer. Where the buyer needs a vessel that will fit the specific dimensions of a terminal or a jetty, the name of the terminal and/or jetty should be detailed in any bid communicated to Platts for publication. Upon performance of any resulting trade, a buyer may wish to take the vessel to a different port based on its charterparty options. In such a situation, the seller is obliged to provide a vessel fitting plausible terminals in the originally nominated port.

Operational Tolerance: Platts reflects bids, offers and trades that limit a counterparty's price exposure to operational tolerance. Operational tolerance is typically limited to plus or minus 10% of the transacted size for cargoes and 5% for barges. For example, a barge size of 3,000 mt would have a maximum operational tolerance of plus or minus 150 mt. When pricing on a floating price basis Platts reflects CIF cargoes where the operational tolerance prices after the completion of discharge, and barges where the operational tolerance prices after the bill of lading.
Northwest European diesel cargo assessments, but continues to normalize them back to the value of French diesel specification.

**Diesel 10ppm NWE Cargoes CIF NWE (AAWZC00):** This assessment is a freight-related netback to the ULSD 10ppm CIF NWE assessment (basis Amsterdam-Rotterdam-Antwerp) using daily freight rates published in the Platts Clean Tankerwire. The assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 10ppm and standard gravity in the range 0.82-0.845. The reference density is 0.845 kg/l. Typical cargo sizes of 10,000 to 40,000 mt are reflected. Effective from January 3, 2017, Platts normalizes to reflect 30,000 mt size plus/minus 10%. Due to an observed change in market flows, in which larger cargoes and vessels are increasingly supplying the market, and following supportive industry feedback, Platts raised the basis size of its CIF Northwest European diesel cargo assessments from 20,000 mt plus/minus 10% to the current standard. The CIF assessment is basis Le Havre with normal charterparty options in the Hamburg to Bordeaux and North Spain range.

The assessment reflects material for delivery 10-25 days from date of publication, with value reflecting the mean value of the delivery period.

**Diesel 10ppm UK Cargoes CIF NWE (AAVBH00):** This assessment is a freight-related netback to the ULSD 10ppm CIF NWE assessment (basis Amsterdam-Rotterdam-Antwerp), based on a freight differential to typical UK ports and using daily freight rates published in the Platts Clean Tankerwire. The basket of flat rates includes typical destinations into the UK: London, Cardiff and Immingham. Thames contributes 50 per cent of the UK assessment, with Cardiff accounting for 30 per cent and Immingham 20 per cent. Effective January 3, 2017, the flat rate used to calculate the netback formula for Diesel 10ppm UK Cargoes CIF NWE is $2.17/mt. This assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 10ppm and standard gravity in the range 0.82-0.845. The reference density is 0.845 kg/l.

**ULSD 10ppm Cargoes FOB NWE (AAVFBO0):** This assessment is derived at a freight differential to the CIF assessment, based on the following routes: Brofjorden, Porvoo, Slagen, Primorsk, Riga and Kaliningrad in to ARA and using daily freight rates published in the Platts Clean Tankerwire. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for ULSD 10ppm FOB NWE is $6.27/mt. This assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 10ppm and standard gravity in the range 0.82-0.845. The reference density is 0.845 kg/l.

**Diesel 10ppm NWE Cargoes FOB NWE (AAWZD00):** This assessment is derived as a freight-related netback to the CIF assessment, based on the following routes: Amsterdam, Rotterdam, Antwerp, Klaipeda, Wilhelmshaven, Ventspils into ARA and using daily freight rates published in the Platts Clean Tankerwire. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for Diesel 10ppm FOB NWE is $6.63/mt. The assessment reflects Benelux and French quality diesel fuel with a maximum sulfur of 10ppm and standard gravity in the range 0.82-0.845. The reference density is 0.845 kg/l.

**10ppm ULSD Cargoes CIF Med:** This assessment typically reflects French quality diesel, but other grades such as Italian and Spanish may be considered in the assessment. The assessment reflects the value of 25,000-30,000 mt cargoes, delivered CIF basis Lavera, with normal charterparty options within the Mediterranean considered. The assessment reflects material for delivery 10-25 days from date of publication, with value reflecting the mean value of the delivery period. Platts also reflects bids, offers and trades into the North Africa port of Flushing-Ghent, and in Mediterranean cargoes.

**10ppm ULSD Cargoes FOB Med:** This assessment is calculated as a freight netback from the 10ppm ULSD CIF MED assessment, based on routes in the Mediterranean from Genoa and Lavera: Santa Panagia, Aliaga, Aghio, Batumi and using daily freight rates published in the Platts Clean Tankerwire for Med-Med for 30,000 mt cargoes. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for ULSD FOB Med is $6.01/mt.

**Diesel 10ppm Barges:** This assessment reflects German specification diesel with a maximum sulfur content of 10ppm. The typical density is basis 0.845 kg/l (actual specific gravity ranges from 0.82 to 0.845 kg/l). The assessment reflects barges of 1,000 to 3,000 mt where the buyer specifies the actual size at the time of the deal.

Platts reflects undyed material in its diesel barge assessment, but the buyer may request red dying of a barge loading in Flushing, Amsterdam, Rotterdam, Antwerp or Ghent at their own expense, and the seller should try to accommodate the request if dying is available at the loading terminal and possible to achieve logistically. The buyer should inform the seller of their intention to dye the barge upon nomination of the barge.

The assessment reflects the value of barges loading FOB basis Amsterdam-Rotterdam-Antwerp 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with value reflecting the mean value of the delivery period. Bids, offers and transactions for Flushing-Ghent may also be published but normalized back to Amsterdam-Rotterdam-Antwerp.

Platts will only reflect bids, offers and trades that are for the front end (first five days of the assessed period), middle window (middle five days of the assessed period) and back end (last five days of the assessed period).

In the eWindow communication environment, buyers have 30 seconds to nominate size upon confirmation of a trade. If a size is not nominated by the buyer within 30 seconds, a default quantity of 2,000 mt applies. This corresponds to the most widely traded size in the market. Size nominations can be specified to the nearest 10 metric tons. Nominations should be confirmed using the eWindow size nomination box or other communication means.
GASOIL

European NWE gasoil assessments currently reflect 0.1% maximum sulfur as a result of European Union directives aimed to reduce the sulfur in gasoil to 0.1% maximum from the beginning of 2008. 0.1 gasoil barges are FOB basis Amsterdam-Rotterdam-Antwerp. Bids, offers and transactions for Flushing-Ghent will also be published.

Platts CIF European gasoil assessments reflect bids, offers and trades that allow a seller to deliver oil from a port cargo basis the seller must provide a vessel commensurate with typical trade patterns in that market.

Platts reflects bids and offers where the seller endeavors to deliver oil on a vessel that will fit plausible terminals and jetties within the port shown in the original bid or offer. Where the buyer needs oil on a vessel that will fit plausible terminals and jetties within the port shown in the original bid or offer. Where the buyer needs a vessel commensurate with typical trade patterns in that market.

Part Cargoes: Platts CIF European gasoil assessments reflect bids, offers and trades that limit a counterparty’s price exposure to operational tolerance. Operational tolerance is typically limited to plus or minus 10% of the transacted size for cargoes and 5% for barges. When pricing on a floating price basis Platts reflects CIF cargoes where the operational tolerance prices after the completion of discharge, and barges where the operational tolerance prices after the bill of lading.

Gasoil 0.1% Cargoes CIF NWE: This assessment reflects French Fuel Oil Domestique (FOD) (with a maximum color rating of 2, clear and bright, a maximum density of 860 kg/l and minimum flash of 57) quality gasoil fuel with a maximum sulfur of 0.1%. Platts also publishes bids, offers and trades for other qualities, including French Fuel Oil Domestique (FOD), Spanish (B&C) and German Deutsche Industrie Norm (DIN) quality gasoil, which may be normalized to the benchmark specification. Specific Gravity is basis 0.845 kg/l for the final assessment.

The assessment reflects typical cargo sizes of 10,000 to 30,000 mt, normalized to reflect 20,000 mt, for delivery basis CIF Le Havre with normal charterparty options. Cargoes with charterparty options in the range Hamburg to North Spain would typically be included. The assessment reflects material for delivery 10-25 days from the date of publication, with value reflecting the mean value of the delivery period.

Gasoil 0.1% Cargoes FOB NWE: This assessment is calculated as a freight netback from the Gasoil 0.1% Cargoes CIF NWE assessment, based on the following routes: Ventspils, Antwerp, Stockholm. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for Gasoil 0.1% FOB NWE is $7.15/mt.

Gasoil 0.1% Cargoes CIF Med: This assessment reflects Spanish (BSC) quality gasoil for heating oil use. Grades which are not widely merchantable, (for instance because of low cetane or above normal water content), may not be reflected in the assessments. The assessment reflects the value of 25,000 to 30,000 mt cargoes, CIF basis Genoa with normal charterparty options. The assessment reflects material for delivery 10-25 days from the date of publication, with value reflecting the mean value of the delivery period.

Platts also reflects bids, offers and trades into the North Africa port of Tangier Med, Morocco, in its Mediterranean cargo assessments. Platts sets out its schedule for changing the seasonal specification of gasoil fuels in late winter and late summer, ahead of the switch from winter to summer and then summer to winter grades. Platts intends to follow broadly similar schedules each year, but the exact dates may be varied in line with prevailing patterns of refining activity and trading liquidity. As trading and seasonal patterns change from year to year, any schedule is provisional and subject to change with only limited notice.

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Gasoil 0.1% Cargoes FOB Med: This assessment is calculated as a freight netback from the Gasoil 0.1% Cargoes CIF Med assessment, based on the following routes: from Malta, Novorossiysk and Batumi to Genoa and Lavera. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for Gasoil 0.1% FOB Med is $6.74/mt.

Gasoil 0.1% Barges FOB ARA: This assessment reflects heating oil grades with a specific gravity of 0.845 kg/l and with a maximum sulfur content of 0.1%. The assessment reflects barges of 1,000 to 3,000 mt, where the buyer has the obligation to specify the actual size at the time of the deal.

The assessment reflects the value of barges loading FOB basis Amsterdam-Rotterdam-Antwerp 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with value reflecting the mean value of the delivery period. Bids, offers and transactions for Flushing-Ghent may also be published but normalized back to Amsterdam-Rotterdam-Antwerp.

Platts reflects undyed material in its 0.1% gasoil barge assessment, but the buyer may request red dying of a barge loading in Flushing, Amsterdam, Rotterdam, Antwerp or Ghent at their own expense, and the seller should not refuse the request. The buyer should inform the seller of their intention to dye the barge upon nomination of the barge.

Platts will only reflect bids, offers and trades that are for the front end (first five days of the assessed period), middle window (middle five days of the assessed period) and back end (last five days of the assessed period).

Gasoil 50ppm Barges FOB ARA: This assessment reflects German specification heating oil with a maximum sulfur content of 50ppm. The typical density is basis 0.845 kg/l. The assessment reflects barges of 1,000 to 3,000 mt. However, the buyer has the obligation to specify the actual size at the time of the deal.

Effective January 4, 2016, Platts aligned certain parameters in its 50ppm gasoil ARA barge methodology with diesel and 0.1% gasoil barges including operational tolerance, loading locations and assessment periods. Since then, Platts has assessed barges with operational tolerance of 5% of the transacted size. Previously, Platts did not include any operational tolerance in its 50ppm gasoil ARA barge assessment.

The assessment reflects the value of barges loading FOB basis Amsterdam-Rotterdam-Antwerp 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with value reflecting the mean value of the delivery period. Bids, offers and transactions for Flushing-Ghent may also be published but normalized back to Amsterdam-Rotterdam-Antwerp.

Platts will only reflect bids, offers and trades that are for the front end (first five days of the assessed period), middle window (middle five days of the assessed period) and back end (last five days of the assessed period).

Platts reflects undyed material in its 50ppm gasoil barge assessment, but the buyer may request red dying of a barge loading in Flushing, Amsterdam, Rotterdam, Antwerp or Ghent at their own expense, and the seller should not refuse the request. The buyer should inform the seller of their intention to dye the barge upon nomination of the barge.
In Low Sulfur Fuel Oil (LSFO) cargoes, Platts understands that it is typical for suppliers to meet broadly shared end-user requirements around sediment, namely a guarantee to meet 0.10 (mass %) maximum sediment under the three sediment tests covered within ISO:8217 standards: Total Sediment Existent (TSE), Total Sediment Potential (TSP), and Total Sediment Accelerated (TSA). Platts therefore considers that merchantable material should meet such a requirement. No indication if the material offered does not meet either, or both, of these requirements. Such offers may be subject to normalization in value assessment. Similarly, sellers expressing interest in hitting bids published during the MOC process are also expected to supply material that meets merchantable standards, including the above specification expectations, to the buyer, unless the buyer has expressly stated different specifications in a published bid.

**Fuel Oil 1.0% Cargoes CIF Med:** This assessment reflects a wide variety of specifications, normalized to material with a maximum sulfur of 1%, material with a density of up to 0.991 kg/l and a maximum viscosity of 380 CST (at 50 degrees C), a maximum combined aluminium and silicon content of maximum 60ppm, 30 degrees Celsius maximum Pour Point, Flash minimum 65 degrees C, CCR minimum 15%, ash maximum 0.1%, water maximum 0.5%, vanadium maximum 150 mg/kg, NCV minimum 9650 kcal/kg, asphaltenes maximum 7%. Material with higher densities such as 0.989 kg/l may be considered at a discount to this typical quality while material with lower densities such as 0.980kg/l may be considered at a premium.

The assessment reflects the value of cargoes of 25,000 to 30,000 mt or 30,000 mt plus/minus 10% operational tolerance, delivered CIF basis Milazzo. Platts considers bids, offers and transactions into a range of East and West Mediterranean locations and normalizes this value to basis Milazzo. The assessment represents EU-qualified material.

The assessment reflects material for delivery 10-25 days from date of publication, with value normalized to reflect the mean value of the delivery period.

When the CIF Med market is illiquid, and when there is insufficient local supply to meet utility demand in the region, Platts may derive the CIF Med value using FOB NWE plus freight into Milazzo.
Since January 2014, Platts has reflected bids, offers and trades into the North Africa port of Tangier Med, Morocco, in its Mediterranean cargo assessments. Under Platts methodology, certain approved alternative locations to the basis assessment port for many oil product assessments may be bid and offered during the Market on Close assessment process. Platts may normalize bids, offers or trades that include the port of Tangier Med as their basis location or as a charterparty option, which reflects Platts current assessment standards of non-basis locations and non-standard charterparty options. The Tangier Med basis location is subject to the same performance requirements as other ports already reflected in Platts assessment process.

**Fuel Oil 1.0% Cargoes FOB Med:** This assessment is established using a freight differential to the CIF Med assessment, using a flat rate based on a basket of typical tanker routes, multiplied by the daily Worldscale rate assessed in Platts Dirty Tankerwire. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for 1% FOB Med Fuel Oil is $4.61/mt. The assessment reflects a wide variety of specifications, normalized to material with a maximum sulfur of 1%, material with a density of up to 0.991 kg/l and a maximum viscosity of 380 CST (at 50 degrees C), a maximum combined aluminum and Silicon content of maximum 60ppm, 30 degrees Celsius maximum Pour Point, Flash minimum 65 degrees C, CCR maximum 15%, ash maximum 0.1%, water maximum 0.5%, vanadium maximum 150 mg/kg, NCV minimum 9650 kcal/kg, asphaltenes maximum 7%. The assessment reflects the value of cargoes of typically 25,000 to 30,000 mt, loading FOB Mediterranean, for EU-qualified material, for loading 10-25 days from date of publication, with value normalized to reflect the mean value of the loading window.

**Fuel Oil 1.0% Cargoes CIF Med:** This assessment reflects 3.5% maximum sulfur with 380 CST maximum viscosity (at 50 degrees centigrade) and 0.999kg/l density with a maximum combined aluminum and silicon content of 60ppm, maximum 30 degrees Pour Point, minimum 60 degrees Flash Point, CCR maximum 18%, ash maximum 0.1%, water maximum 0.5%, vanadium maximum 350 mg/kg, TSP 0.1%, asphaltenes maximum 8%, sodium maximum 100 mg/kg, acid number 2.5 mg/kg, zinc maximum 15 mg/kg, phosphorus maximum 15 mg/kg, calcium maximum 30 mg/kg, Free from used lubricating oils (ULO) (calcium > 30 and zinc > 15; or calcium > 30 and phosphorus > 15), H2S 2ppm max. Platts takes an inclusive approach to the assessment, as the quality of fuel oil in the Mediterranean is less homogenous than that in North West Europe.

Since January 2014, Platts has reflected bids, offers and trades into the North Africa port of Tangier Med, Morocco, in its Mediterranean cargo assessments. Under Platts methodology, certain approved alternative locations to the basis assessment port for many oil product assessments may be bid and offered during the Market on Close assessment process. Platts may normalize bids, offers or trades that include the port of Tangier Med as their basis location or as a charterparty option, which reflects Platts current assessment standards of non-basis locations and non-standard charterparty options. The Tangier Med basis location is subject to the same performance requirements as other ports already reflected in Platts assessment process.
**Fuel Oil 3.5% Cargoes FOB Med:** This assessment is established using a freight differential to the CIF Med assessment, using a flat rate based on a basket of typical tanker routes, multiplied by the daily Worldscale rate assessed in Platts Dirty Tankerwire. Effective January 3, 2017, the Worldscale flat rate used to calculate the netback formula for 3.5% FOB Med Fuel Oil is $4.84/mt. The assessment reflects 3.5% maximum sulfur with 380 CST maximum viscosity (at 50 degrees centigrade) and 0.999 kg/l density with a maximum combined aluminum and silicon content of 60ppm, max 30 degrees Pour Point, minimum 60 degrees Flash Point, CCR maximum 18%, ash max 0.1%, water maximum 0.5%, vanadium maximum 350 mg/kg, TSP 0.01%, asphaltenes max 8%, sodium max 100 mg/kg, acid number 2.5 mg/kg, zinc maximum 15 mg/kg, phosphorus maximum 15 mg/kg, calcium maximum 30 mg/kg. Free from used lubricating oils (ULO) (calcium > 30 and zinc > 15; or calcium > 30 and phosphorus > 15), H2S 2ppm maximum. Platts takes an inclusive approach to the assessment, as the quality of fuel oil in the Mediterranean is less homogenous than that in Northwest Europe.

The assessment reflects the value of cargoes of 25,000 to 30,000 mt or 30,000 mt each, loading FOB Mediterranean basis Italy. Cargoes up to 50,000 mt may be taken into account when arbitrage openings present themselves, for instance to Asia.

The assessment reflects material for delivery 10-25 days from date of publication, with value normalized to reflect the mean value of the delivery period.

**Timing:** Reflects material for delivery 10-25 days from date of publication, with value normalized to reflect the mean value of the delivery period.

When the market is illiquid, CIF NWE value may be derived as a differential to FOB barge, reflecting blending economics, break-bulk cost and time gradients.

**Fuel Oil 3.5% Cargoes FOB NWE:** As of January 3, 2017 the specification of this assessment was updated to reflect the following; viscosity of 650-700 CST, density of 0.991 kg/l maximum, 60ppm maximum aluminum and silicon, and a water content of 0.50%. Typically, standard cracked Russian quality M-100 is reflected in the assessment. Platts recognizes that the quality of M-100 may vary widely in density, viscosity, water content, and metals among other factors, and specifies the actual size at the time of the deal. In all cases the smallest tradeable size is considered to be the strongest indication of value, and in this case the smallest size applicable is 2,000 mt.

The assessment reflects the value of barges loading FOB basis Rotterdam, for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with value normalized to reflect the mean value of these loading ranges.

**Fuel Oil 3.5% 500 CST FOB Rdam Barges:** This assessment reflects the value of 3.5% maximum sulfur with 500 CST maximum viscosity (at 50 degrees C) and 1.010 kg/l density with a maximum combined aluminium and Silicon content of 60ppm, 30 maximum Pour Point, Flash minimum 60 degrees C, CCR maximum 29%, ash maximum 0.15%, water maximum 0.5%, vanadium maximum 300 mg/kg, TSP 0.7%, zinc maximum 15 mg/kg, Phosphorus maximum 15 mg/kg, Calcium maximum 30 mg/kg.

Barge assessments reflect parcels of 2,000 to 5,000 mt each. Barges are traded typically in 2,000 mt lots where the buyer specifies the actual size at the time of the deal. In all cases the smallest tradeable size is considered to be the strongest indication of value, and in this case the smallest size applicable is 2,000 mt.

The assessment reflects the value of barges loading FOB basis Rotterdam, for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward, with value normalized to reflect the mean value of these loading ranges.

**Fuel Oil 3.5% Barges:** This assessment reflects the value of 3.5% maximum sulfur with 380 CST maximum viscosity (at 50 degrees C) and 0.999 kg/l density with a maximum combined aluminium and Silicon content of 80ppm, 30 max Pour Point, Flash minimum 60 degrees C, CCR maximum 18%, ash maximum 0.1%, water maximum 0.5%, vanadium maximum 300 mg/kg, TSP 0.1%, zinc maximum 15 mg/kg, phosphorus maximum 15 mg/kg, calcium maximum 30 mg/kg.

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**Fuel Oil 3.5% 500 CST FOB Rdam:** This assessment reflects the value of 3.5% maximum sulfur with 500 CST maximum viscosity (at 50 degrees C) and 1.010 kg/l density with a maximum combined aluminium and Silicon content of 60ppm, 30 maximum Pour Point, Flash minimum 60 degrees C, CCR maximum 29%, ash maximum 0.15%, water maximum 0.5%, vanadium maximum 300 mg/kg, TSP 0.7%, zinc maximum 15 mg/kg, Phosphorus maximum 15 mg/kg, Calcium maximum 30 mg/kg.

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### FEEDSTOCKS

#### Straight-run 0.5-0.7% Cargoes FOB NWE:
This assessment reflects the value of Low Sulfur Straight-Run fuel oil (LSSR) from Northwest Europe with the following specifications: sulfur 0.5-0.7%, normalized to 0.6% CCR maximum, viscosity 200 CST maximum, at 50 degrees vanadium 10ppm, sodium 10ppm, nickel 10ppm. As of January 3, 2017, Platts reflects a wider density range of 0.920-0.950 kg/l at 15 degrees centigrade. A conversion factor between barrels and metric tonnes of 6.77 will continue to be used, in line with prevailing market standards. Cargo assessments typically reflects parcels of 25,000-30,000 mt each within NWE, but cargoes of up to 55,000 tonnes may be taken into account when arbitrage openings present themselves. The assessment reflects cargoes for loading FOB NWE basis Rotterdam, for loading 10-25 days from date of publication, with value normalized to reflect the mean value of the delivery period.

#### Straight-run 0.5-0.6% Cargoes CIF NWE:
This assessment represents the value of VGO cargoes of sulfur: 0.6% max; Density: 0.92 kg/l max; Metals: Iron 2 ppm max, Sodium 2 ppm max, Nickel 1 ppm max, Copper 1 ppm max, vanadium 1ppm max; CCR: 0.5% max; nitrogen: 1500 ppm max; Pour point: 45 degrees celsius max; Flashpoint: 100 degrees celsius min; Aniline: 80 degrees celsius min; asphaltenes: 700ppm max; Tan: 0.5 mg KOH/g max.

Platts will continue to consider other merchantable HSVGO and LSVGO specifications in its assessment process, and may normalize to the published standard specifications.

#### VGO 0.5-0.6% Cargoes FOB NWE:
This assessment represents the value of VGO cargoes of sulfur: 0.6% max; Density: 0.92 kg/l max; Metals: Iron 2 ppm max, Sodium 2 ppm max, Nickel 1 ppm max, Copper 1 ppm max, vanadium 1ppm max; CCR: 0.5% max; nitrogen: 1500 ppm max; Pour point: 45 degrees celsius max; Flashpoint: 100 degrees celsius min; Aniline: 80 degrees celsius min; asphaltenes: 700ppm max; Tan: 0.5 mg KOH/g max.

Platts will continue to consider other merchantable HSVGO and LSVGO specifications in its assessment process, and may normalize to the published standard specifications. Cargo assessments reflect parcels of 15,000 to 35,000 mt in size, normalized to 30,000 mt, for delivery CIF NWE basis ARA, for delivery 10-25 days from date of publication with value normalized to reflect the mean value of the delivery period.

#### VGO 2% MAX Cargoes CIF NWE:
This assessment represents the value of VGO cargoes of sulfur: 2% max; Density: 0.92 kg/l max; Metals: Iron 2 ppm max, Sodium 2 ppm max, Nickel 1 ppm max, Copper 1 ppm max, vanadium 1ppm max; CCR: 0.5% max; nitrogen: 1700 ppm max; Pour point: 45 degrees celsius max; Flashpoint: 100 degrees celsius min; Aniline: 75 degrees celsius min; asphaltenes: 700ppm max; Tan: 0.5 mg KOH/g max. Platts will continue to consider other merchantable HSVGO and LSVGO specifications in its assessment process, and may normalize to the updated specifications. Cargo assessments reflect parcels of 15,000 to 35,000 mt in size, normalized to 30,000 mt, for delivery CIF NWE basis ARA, for delivery 10-25 days from date of publication with value normalized to reflect the mean value of the delivery period.

#### EMEA Low Sulfur VGO (LSVGO) and High Sulfur VGO (HSVGO) Cargoes
ARA Low Sulfur VGO (LSVGO) and High Sulfur VGO (HSVGO) cargo sizes of up to 55,000 mt are eligible for assessment when arbitrage openings make these a significant market factor.

### METHODOLOGY AND SPECIFICATIONS GUIDE

**EUA and AFRICA REFINED OIL PRODUCTS: MARCH 2017**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>CODE</th>
<th>Mavg</th>
<th>Pavg</th>
<th>WAVG</th>
<th>CONTRACT</th>
<th>LOCATION</th>
<th>DELIVERY PERIOD</th>
<th>MIN SIZE</th>
<th>MAX SIZE</th>
<th>CURRENCY</th>
<th>UOM</th>
<th>CONV</th>
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<tbody>
<tr>
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<td>PKABA00</td>
<td>PKABA03</td>
<td>ALBH00</td>
<td>ALBH03</td>
<td>FOB</td>
<td>NWE (Rotterdam)</td>
<td>10-25 days forward</td>
<td>25,000</td>
<td>55,000</td>
<td>US $</td>
<td>MT</td>
<td></td>
</tr>
<tr>
<td>VGO 0.5-0.6% FOB NWE</td>
<td>AAHPX00</td>
<td>AAHPY00</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>NWE (Rotterdam)</td>
<td>10-25 days forward</td>
<td>15,000</td>
<td>55,000</td>
<td>US $</td>
<td>MT</td>
<td></td>
</tr>
<tr>
<td>VGO 2.0%S CIF NWE</td>
<td>AAHND00</td>
<td>AAHNJ00</td>
<td>-</td>
<td>-</td>
<td>CIF</td>
<td>ARA (NWE)</td>
<td>10-25 days forward</td>
<td>15,000</td>
<td>35,000</td>
<td>US $</td>
<td>MT</td>
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</tr>
<tr>
<td>VGO 2.0%S FOB NWE</td>
<td>AAHNI00</td>
<td>AAHNJ00</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>NWE (Rotterdam)</td>
<td>10-25 days forward</td>
<td>15,000</td>
<td>55,000</td>
<td>US $</td>
<td>MT</td>
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</tr>
<tr>
<td>VGO 2.0%S FOB Rotterdam, 30 days forward</td>
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<td>AAHK100</td>
<td>-</td>
<td>-</td>
<td>FOB</td>
<td>ARA, NWE (Rotterdam)</td>
<td>3-15 days forward (Monday-Tuesday) 5-15 days forward (Wednesday-Friday)</td>
<td>1,000</td>
<td>5,000</td>
<td>US $</td>
<td>MT</td>
<td></td>
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</tbody>
</table>
The assessment represents cargoes loading FOB NWE basis Rotterdam, for loading 10-25 days from date of publication, with value normalized to reflect the mean value of the loading window.

**VGO 2% MAX Barges**: This assessment represents the value of VGO cargoes of sulfur: 2% max; Density: 0.92 kg/l max; Metals: Iron 2 ppm max, Sodium 2 ppm max, Copper 1 ppm max, Vanadium 1 ppm max; CCR: 0.5% max; Nitrogen: 1700 ppm max; Pour point: 45 degrees celsius max; Flashpoint: 100 degrees celsius min; Aniline: 75 degrees celsius min; Asphaltenes: 700 ppm max; Tan: 0.5 mg KOH/g max. Platts will continue to consider other merchantable HSVGO and LSVGO specifications in its assessment process, and may normalize to the updated specifications. Barge assessments reflect parcels of 1,000 to 5,000 mt each, loading FOB ARA basis Rotterdam, for loading 3-15 (Monday-Tuesday) or 5-15 (Wednesday through Friday) days forward.
REVISION HISTORY

March 2017: Platts clarified a Worldscale rate used to calculate the netback formula for FOB Med Naphtha Cargoes. Previously, an incorrect value for the 2017 FOB Med naphtha cargo freight netback was published.

January 2017: Platts updated Worldscale rates to incorporate changes from 2016 to 2017. Platts updated its ULSD methodology to reflect the growing size of the vessels supplying the market. As such, the parcel size reflected in cargo assessments was increased to 30,000 mt, from 20,000 mt. LNG methodology was also updated to reflect the discontinuation of several freight based assessments, and the name changes of several more. Fuel oil methodology in NWE and the Med was updated to reflect changes in the treatment of freight and VGO density specifications in NWE were updated to reflect prevailing market standards. From January 2017, the CIF NWE assessment is calculated as a freight differential to the FOB NWE assessment.

November 2016: Platts completed an annual update to the Europe & Africa Refined Oil Products Guide in November 2016. Details of Platts Europe and Africa bunker fuel assessments, which are now included in a separate global methodology guide for bunker fuel, were removed. Platts included previously published guidance regarding sediment and ULDO in the merchantability of fuel oil reflected in assessments. Platts also updated language regarding operational tolerance for cargoes and barges to standardize descriptions across sections where possible, and incorporated a series of updates to its LPG assessments for the region. Platts also made a number of typographical edits for style and clarity.

February 2016: Platts updated the guide to reflect a change in its FOB ARA 50ppm gasoil barge methodology change and incorporate new 2016 Worldscale flat rates where applicable.

November 2015: Platts updated the guide to include new gasoline assessment methodology for West Africa Gasoline FOB NWE and West Africa Gasoline CIF West Africa. Platts also made updates to the gasoil and diesel sections, noting guidance on clear and bright specifications for ultra low sulfur diesel, requests to dye and new FBT standards in the UK. Platts added a reference to previously published standards for CIF cargo quality testing. Platts noted previously issued guidance that jet barge bids may not be for one port only, and noted guidance for vessel size expectations for cargos in various cargo assessments, particularly in relation to port destination changes requested by a buyer under charterparty options. Platts updated to the high sulfur fuel oil specification sections of the guide. Platts added details of a new assessment of ultra low sulfur bunker fuel. Platts amended the list of ports where 1% bunker fuel is assessed to better reflect Platts updated assessments.

July 2015: Platts completed an annual update to the Europe & Africa Refined Oil Products Guide in July 2015. In this update, Platts reviewed all content. Platts updated guidance around how to report information and expectations for contactability. Platts also consolidated guidance regarding review of reported trades. In the specifications section of the guide, In specifications, Platts updated this guide to reflect changes in assessment sizes for European naphtha cargoes, diesel cargoes and barges, and gasoil barges, as well as including the Platts assessed specification for CIF Northwest naphtha cargoes. Platts removed all references to Falmouth bunker assessments, which were discontinued in July 2015. Platts incorporated guidance around operational tolerance naphtha and naphtha and naphtha and naphtha and naphtha assessment processes for ULSD and gasoil barges that had previously been published in subscriber notes. Platts removed descriptions for swaps assessments where those definitions are already provided in its Platts Forward Curve methodology guide.

December 2014: Platts updated this guide to reflect the addition of a new FOB AR refermate assessment and also to include a new fuel oil barge assessment reflecting Fuel Oil 3.5% 500 CST specifications. Platts also updated this guide to reflect a change in methodology in the CIF NWE naphtha assessment to reflect a broader cargo size range and also to reflect an increase in the cargo size reflected within the ULSD 10ppm CIF NWE assessment. Platts also updated the guide to reflect an update to the NWE LS and HS VGO specifications and also 2015 netback calculations for refined products. Platts added a notation for its 500 CST bunker fuel assessment. Platts also updated this guide to reflect methodology changes for 0.1% and ULSD 10ppm FOB ARA barge assessments. These updates included amending the size, loading dates and load port locations reflected in both assessments. Finally, Platts updated freight rates for netbacks described in this guide to 2015 value.

June 2014: Platts completed an annual update to the Europe & Africa Refined Oil Products Guide in June 2014. In this update, Platts reviewed all content. The guide was updated to include a description of seasonal specification changes in the European gasoline market; remove database codes for monthly averages associated with Monthly-To-Date cumulative averages for LPG (monthly averages for cumulative MTD assessments were discontinued in July 2013); remove description of jet fuel Mediterranean assessments that were previously discontinued; and remove codes for discontinued MDO assessments in Europe and Africa. Platts added more information around typical size operational tolerance in the cargo market; the inclusion of Tangiers, Morocco as a location considered in Mediterranean cargo assessments for gasoline, middle distillates and fuel oil and clarified wording around CIF cargo destination deviations. Gasoline barge names were clarified in text to be simply “AR”, not “ARA” where they had been erroneously labelled. Platts consolidated guidelines around publishing information during the MOC assessment process into the MOC Data Publishing Principles section, and incorporated clarification guidance about how to express interest in bids and offers that were published in January 2014 and May 2014.

March 2014: Platts updated the Europe & Africa Refined Oil Products Guide in February 2014. The updated guide includes nomination procedures for cargoes and barges that were published in an older copy of the guide, but were omitted from recent issues.

February 2014: Platts updated the Europe & Africa Refined Oil Products Guide in February 2014. The updated guide provides updates to 2014 netback calculations, clarifies wording and terminology in the bunker fuel section and updates the naphtha methodology to include guidance on inert gas system vessels that was originally published in 2010.

November 15, 2013: Platts updated this guide, making minor edits
through the text, particularly clarifying statements regarding how product assessments are normalized to reflect the mean value of loading and delivery dates. In this update, Platts noted that ex-duty cargoes of jet fuel will be reflected in its benchmark Jet CIF Northwest Europe Cargo assessment with effect from January 1, 2014. Platts also incorporated a clarification regarding how measurements of the quantity delivered are typically conducted in the ARA barge market. Platts also removed references to MDO assessments, which have been suspended.

**September 2, 2013:** Platts discontinued its European Marine Diesel assessments. Platts had been assessing MDO for several ports in the EMEA region since 1986. Since that time, demand for MDO had generally been replaced by demand for marine gasoil, or other similar fuels. As of mid-2013, MDO typically accounted for less than 1% of bunker fuel supplied at major ports in the EMEA region. Prior to the discontinuation, specifications had generally conformed with that for DMB. Kinematic viscosity at 40°C, maximum 11 cst; flash point 60 degrees Celsius minimum; pour point (upper) winter quality 0 degrees Celsius; pour point upper summer quality 6 degrees Celsius; ash 0.01% maximum, sulfur, maximum 2%; water, 0.3% maximum, zinc maximum 15 mg/kg, phosphorus maximum 15 mg/kg, calcium maximum 30 mg/kg.

**August 2013:** Platts revamped all Oil Methodology and Specifications Guides, including its Europe & Africa Refined Oil Products Guide, in August 2013. This revamp was completed to enhance the clarity and usefulness of all guides, and to introduce greater consistency of layout and structure across all published methodology guides. Methodologies for market coverage were not changed through this revamp, unless specifically noted in the methodology guide itself.