

Methodology and Specifications Guide

Asian Oil Products

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LATEST UPDATE: October 2009

INTRODUCTION

Platts Assessment Methodologies in Asia and the Middle East

Platts provides an accurate assessment of the value of various refined oil products through a transparent price assessment process. This report contains the specifications and methodology for products in Singapore, Japan, Korea and the Middle East. It is to be used as a reference for the various products assessed by Platts and to enhance the awareness in the trading community of what the assessments mean. This guide is updated regularly and will keep you informed of additional changes.

If the quality or grades assessed change, Platts informs subscribers in advance through the various wires, faxes, printed products and electronic systems.

Platts price specialists focus on price discovery and follow prices in all main trading markets. In markets where trading activity occurs continuously, Platts price specialists cover those markets continuously as well, with the editorial responsibilities transferred across the globe. In the Asia-Pacific region, Platts specialists and energy reporters in Singapore, Tokyo, Sydney and Hong Kong track prices starting at 9.30 am Singapore time.

Platts staff track events as well as pricing developments with the information then summarized in our daily reports. The market activity is reflected in the assessments in a very rigorous manner using a methodology developed by Platts. The methodology reflects the activity of the market players and takes into account industry practices in each reporting region.

Platts assessments focus on commodity grades in the various regions and reflect activity and grades that are typical for each region. We are listing the most important factors used in the assessment methodologies.

Industry Standards:

- Quality Specifications
- Typical Volume
- Loading Timing
- Location

Quality specifications

Platts assessments for Singapore reflect standard qualities and the main specifications are listed in this guide. The Platts assessment reflects the standard grade and therefore market participants can determine more efficiently what the quality differentials should be versus the benchmark grades. Platts also assesses paper values up to one year forward for refined products, and up to three years forward for crude oil.

Typical Volume

The volumes traded in the market also vary greatly and the prices for the parcels vary depending on the volume. For the gasoil assessments, Platts focuses on volumes for a minimum of 150,000 barrels for gasoil, for jet 100,000 barrels, for fuel oil 20,000mt, gasoline 50,000 bbl and naphtha C+F Japan 25,000 mt. In circumstances where Platts reflects a volume range in its Asian crude oil and products assessments, the smallest volume within the published guidelines will take precedence in the assessment process. For example, a bid for 150,000 barrels of gasoil on a FOB Singapore basis would take priority over an offer for 250,000 barrels, in cases where the bid and offer might cross due to volume differences.

Loading time

The assessments for Singapore reflect pricing for products loading 15-30 days from the date of publication. For instance, on January 2, Platts assessments reflect the product market 15-30 days from date of publication, namely January 17- February 1.

Platts is very rigorous in following this important timing specification due to variability in pricing in the various windows, particularly when a market is steeply in contango or backwardation. It is not uncommon in times of tight supply for the backwardation to be over \$3.00/month or roughly 10 cts/day. This means that cargoes loading one week apart can vary in price by close to 70 cts/bbl, or even more, depending on the steepness of the curve.

Thus it is extremely important to follow pricing windows very methodically. In a contango market, the excess of prompt barrels causes the front end to be significantly cheaper than barrels loading at a later date, while in backwardation tight prompt supply causes the front end of the curve to be much higher than the back end of the curve.

By using a methodology where Platts focuses on a very specific window the consistency of prices is maintained, with the variability in the assessments reflecting a price move rather than an emphasis in a different part of the price curve.

Platts reflects a 15-30 day assessment window from the day of publication for the Singapore product assessments to take into account the prevailing trading practices in the Asian region. To establish the 15-30 day period, counting begins one day ahead of the publication date. For example, on July 14, Platts would assess cargoes loading on July 29 until August 13, inclusive of both dates. Buyers and sellers typically define a five-day date range that falls within the overall 15-30 days forward.

Most companies tend to cover their requirements far in advance with sellers also selling forward. As a result, most of the liquidity is centered on this time period for physical transactions. By not

taking the first two weeks into consideration, transactions reflecting distressed prices are excluded.

Location

Platts publishes assessments for several locations on a FOB and C+F basis. Platts publishes FOB Arab Gulf, China, Japan, Singapore and South Korea assessments. Platts also publishes C+F Australia, China and Japan assessments. Spot transactions in the region are typically done at a differential versus the Mean of Platts Singapore (MOPS) assessment. The main benchmark is FOB Singapore and FOB bids/offers for any terminal or refinery in Singapore are accepted as a basis for pricing.

Reporting coverage

In Asia, Platts has offices in Singapore, Tokyo, Hong Kong, Guangzhou, Sydney and Dubai. Reporters covering the products markets in Asia are on the phone from around 9:30am to 7:30pm Singapore time. FOB Singapore assessments reflect trading activity up to 4:30pm Singapore time. All market activity is viewed in light of its market relevance, repeatability and transparency. Transactions between related parties or transactions that do not meet Platts high standards for transparency, verifiability and repeatability may not be taken into account.

Platts guidelines for Global Alert page 190 trading activity

Buyers and sellers are able to communicate bids or offers directly to Platts price specialists. If those bids and offers are determined to be fit to publish Platts will post them in its electronic systems. Companies must be perceived by the market as having appropriate credit and must be credible to Platts and have a good performance record. Trades between affiliates, subsidiaries or related parties will not be recognized and may result in the loss of credibility by the parties, and subsequent removal of the privilege to submit bids and offers.

All bids and offers are firm from the moment of submission. Bids and offers must in principle be open to any reputable and creditworthy counterparty. Bids and offers are to be submitted by 16:00:00:99 Singapore time. Bids/offers will not be accepted from 16:00:00:99 precisely. Platts recognizes only the time of receiving a message of intent to buy/sell, not the time it was sent by the trading party. The volume, quality or loading timing cannot be changed from 16:00:00:99. However, an onscreen seller or buyer has the right to change the price of the offer or bid up to 16.25.00:99. No changes in price can be made from 16:25:00:99 precisely, except for naphtha, where changes may be made up to 16:29:00:99 precisely. Bids and offers for all products (including C+F Japan naphtha) expire at 16:30:00:99 Singapore time.

Platts will exclude transactions, bids/offers or any market indications when these appear to be unrepresentative of the market, or unrepeatable. 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.

Buyers or sellers may name their own terms and conditions for trade. These terms and conditions will be posted on page 190 by Platts. However, any deal done on non-standard trading terms and conditions may not be used in Platts' assessment. Any terms and conditions used on Platts' page 190 window between trading parties that do not reflect standard market trading practices outside the trading window may not be used for assessments.

Buyers or sellers can withdraw bids/offers at any time provided no prior interest to transact has been expressed by any potential counter-party.

Following any trade, the original onscreen seller/buyer is obliged to revert immediately as to whether or not they are there for more volume. If the onscreen seller or buyer fails to indicate if they are intending to sell or buy more, upon reporting the trade, then by default they are no longer selling on or buying on. All onscreen buyers or sellers are obliged to report their trades. Any third party executing a trade with an onscreen buyer or seller is by definition accepting Platts editorial protocols and therefore needs to disclose any information relevant to the transaction.

If, following a physical trade, any party expresses interest to buy/sell at a time near to the close of trade at 16:30:00:99, that party must stand firm on that bid/offer for three minutes, until 16:32:99, in order to adequately test repeatability. A notice for extension of the window will be sent out on page 190 as soon as possible after this interest is posted.

Platts relies on an internal clock to determine the sequence of events within Platts' assessment process. In markets where Platts' eWindow is in operation, the Platts eWindow system's 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 with Platts long-established assessment methodology, buyers or sellers can withdraw bids/offers at any time, provided no prior interest to transact has been expressed by any potential counter-party. All bids and offers are firm from the moment it is submitted into the Platts eWindow system to the moment it is traded, window period closes or the bid/offer order is withdrawn from the system by the trader or the Platts editor.

If an onscreen bid is taken up by a seller, Platts will not recognize subsequent buying interest at the traded price by an offscreen player as a test of repeatability, as this would be treated as a fresh (and therefore late) bid. Although Platts will send out any new offscreen buying interest on the page 190 after 16:30:00:99 (or after the close of an extended window), any deal done at that price would not be reflected in Platts' assessment. Further selling interest after an onscreen bid is hit, however, is recognized as a true test of repeatability. The reverse conditions

apply in like fashion for any onscreen offer that is taken out.

In case of technological problems suffered by the page 190 trading window, any buying or selling interest may be deemed by Platts to be non-public and non-executable, and therefore not used for Platts' assessment.

Platts will monitor all the activity and the price formation that occurs with the transparency provided by firm bids/offers or deals done. Platts may not take transactions into consideration if negotiations for deals heard done have not been monitored by Platts. Deals done at a level different from those publicly available to all market players may not be taken into consideration. Platts assessments will then reflect the closing levels.

The three main factors in price determination are:

- Fixed price
- Premiums
- Paper/Swaps

Fixed price

The ultimate question in the mind of an end user, a producer, refiner, trader or broker is PRICE. Price in turns determines expense, refining margin, profit, loss, etc. The spot market trades actively on a FOB Singapore basis on a fixed price basis. Fixed price is defined as the forward value plus the differential. Activity has been commoditized and most players now can focus on prices as the qualities, volumes and loading procedures have been standardized.

Premiums/Discounts

Many transactions are carried out in relation to a standard commodity. In this case a differential, also know as premium in the Asian markets, is generated. Premiums will arise if the quality, volumes, location or loading times differ from the benchmark. In addition, the floating transactions are done in relation to the assessments. Premiums will usually rise in those times when the market is backwardated and the steeper the curve the greater the premium. In a contango situation, premiums will have a tendency to turn into discounts. Platts page 190 displays trading activity on a premium or fixed price basis.

Paper/Swaps

Paper/swaps are another major determinant in price and are routinely considered in Platts assessment systems. Swaps trade freely in an over the counter market and can trade at any time. Paper markets are very reactive and provide players with an instant feedback of market conditions. Swaps react to arbitrage conditions or movements in overseas market as well as local conditions.

Swaps or paper are risk management tools. Swaps allows players to lock prices because swaps enable players to transform floating prices to fixed or fixed to floating. Swaps is also used as a speculative tool. Platts reflects the immediate changes in the swaps markets on Platts Global Alert page 190.

The Spot Market

The three factors, fixed price, premiums and papers come all together in the spot price determination. For instance, if a physical jet cargo trades at the \$150.00/bbl for a 100,000 bbl parcel loading 20-25 days forward FOB Singapore, we can then determine that this commodity's spot level is around \$150.00/bbl.

In the absence of fixed prices, swaps and prevailing premiums/discounts will be used in the assessments. For example, if the underlying paper market for the assessment window is \$151.00/bbl and the discount is at \$1.00/bbl then the fixed price equivalent is \$150.00/bbl. The premium/discount assessed are the differential between the fixed price and the swaps level for the specified loading window.

Sample contracts

Platts is committed to provide as much help to its subscribers and in this guide we have included copies of standard swaps contracts and physical contracts.

Performance

Platts' editorial guidelines governing its assessment process require it to consider only those transactions, bids or offers where market participants perform under typical contractual terms and logistical practices. Platts accepts that individual companies may have trading limits with counterparties and that national legislation may prevent companies from dealing in materials of certain origin. Such counterparty issues will be dealt with on a case-by-case basis.

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, offers must be firm and transactions should be performable within the contractual parameters. If there are any issues with quality, operations or logistics, some deviations may occur but only in exceptional circumstances. 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 even book outs.

In detail:

- 1) Any transparent bid and offer submitted for publication by Platts must be true, firm and performable.
- 2) Any transaction stemming from such publication of information (i.e. bids, offers) volunteered by a party must be performed for the information to be true and correct.
- 3) Neither buyer nor seller may unilaterally cancel any transaction. While there may be exceptional circumstances such as bankruptcy, all cases will be reviewed by Platts for fitness, fairness and accuracy.
- 4) Performance should occur as per the contractual terms made explicit at the time the bid, offer or transaction was made. Implicit terms will be viewed in the larger context of normal clauses typically applied in the market in question.

FOB Singapore gasoline specifications	
Property	Standard
Research Octane Number (RON)	Min 92.0, Min 95.0, Min 97.0
Lead content, gpb/l	Max 0.013
Density at 15 deg C, kg/l	Report
Reid Vapour Pressure (PSI)	Max 10.0
Distillation, degree C	
Initial Boiling Point	Report
10% evaporated	Max 74
50% evaporated	Max 127
90% evaporated	Max 190
Final Boiling Point	Max 225
Residue, % vol	Max 2.0
Loss, % vol	Max 2.0
Odor	Marketable
Existent gum, mg/100ml	Max 4.0
Benzene content, % vol	Max 5.0
Sulphur, % wt	Max 0.05
Doctor test	Negative
or Mercaptan sulphur, ppm	Max 15
Mercaptan sulphur, % wt	Max 0.0015
Copper corrosion (3 hours at 50 deg C)	Max 1.0
Induction period, minutes	Min 240
Oxygenates content, % vol	Max 14.0 (of which maximum MTBE content of 10.0)
Aromatics, % vol	Report
Color Undyed	Undyed, light yellow
Alcohol	No additions of any alcohol
Metallic additives	None added
Acetone	Max 100 ppm

5) 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. In these cases, Platts expects the spirit of the contract to be fulfilled by physical performance, by a mutual book-out where the non- or late-performing party offers to buy/sell back the position (in which case, the book-out must be normal and will be reviewed by Platts for fitness and fairness) or by adjusting the price of the transaction. In almost all circumstances, the adjustment is not and should not be due to a flat price movement, 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. Platts will review such proposals/arrangements to protect the integrity of its assessment process.

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

PRODUCTS

GASOLINE

Platts assesses physical gasoline grades in Singapore, China, Korea, Japan, Australia, and India:

Singapore	-	97 RON unleaded
Singapore	-	95 RON unleaded
Singapore	-	92 RON unleaded
China	-	90 RON unleaded
China	-	93 RON unleaded
Korea	-	95 RON unleaded
Japan	-	91-92 RON unleaded
Japan	-	95 RON unleaded
Australia	-	92 RON unleaded
Australia	-	95 RON unleaded
India	-	95 RON unleaded
Arab Gulf	-	95 RON unleaded

Singapore

- 1) Singapore - 97 research octane number (RON) unleaded grade
- 2) Singapore - 95 RON unleaded
- 3) Singapore - 92 RON unleaded

Below are standard industry specifications that Platts uses in its assessments for gasoline FOB Singapore. Platts derives its assessments from information obtained in the marketplace,

including transactions reported on Platts Global Alert page 190. All the bids/offers and transactions must meet these specifications, unless clearly stated prior to the submission of bid/offer. The specifications listed below are not all inclusive, but cargoes must at all time be deemed to fall within industry standards including merchantability of the product.

Transactions and bids/offers of a minimum of 50,000 bbl are considered for the assessments. The maximum cargo size for any one bid or offer is 150,000 bbl. The assessments reflect transactions and bids/offers for barrels loading 15 to 30 days from the date of publication. Market participants should specify loading for a five-day date range. Ten days prior to loading, seller must declare terminal and buyer nominates vessel seven days prior with the buyer narrowing the loading window to three days, subject to loading terminal acceptance.

FOB Singapore gasoline specifications follow:

China

- 4) China - 90 RON unleaded
- 5) China - 93 RON unleaded

Platts assesses 90 and 93 RON unleaded gasoline FOB South China. Assessments take into account spot trades of 25-30,000mt. This market typically trades at a differential to naphtha or to Singapore 92 RON unleaded assessments. Platts' China assessments are expressed in USD/mt, using a conversion factor of 8.5 from USD/bbl.

Korea

- 6) Korea - 95 RON unleaded

Platts assesses 95 RON unleaded FOB Korea. This market typically trades on a naphtha related basis.

Platts CFR Japan naphtha specs	
Paraffins	Min 65%
Specific gravity at 60 deg F	0.65-0.74 g/m
Conversion factor	9 barrels per tonne
RVP	Max 13 psi
Sulfur	Max 650 ppm
Initial boiling point	Min +25 deg C
Final boiling point	Max 204 deg C
Chlorine content	Max 1ppm
Mercury	Max 1 ppb
Arsenic	Max 20 ppb
Olefins	Max 1%
N-paraffins	Min 30%
Colour	Min +20 saybolt
Lead	Max 150 ppb
Oxygenates	Max 50 ppm TAME, MTBE and/or ETBE

Japan

- 7) Japan - 91-92 RON unleaded
- 8) Japan - 95 RON unleaded

Platts assesses 91-92 RON unleaded C+F Chiba. The trace lead content is 0.01g/l. This assessment is a netback into Japan that uses the FOB Singapore 92 RON unleaded gasoline as a base. A freight rate for 30,000mt tankers is used. The freight amount is divided by 8.5 and added to the Singapore base assessment.

The 95 RON unleaded C+F Chiba assessment is determined by assessing the gasoline market delivered into the Chiba region in Japan. This market typically trades at a differential to naphtha.

Australia

- 9) Australia - 92 RON unleaded
- 10) Australia - 95 RON unleaded

Platts assesses Australian 92 and 95 RON unleaded on a C+F Melbourne/Sydney basis. These assessments are determined on a netback basis from FOB Singapore 92 and 95 RON unleaded assessments using a freight rate for 30,000mt tankers. Freight rates are published daily in Platts Clean Tankerwire.

India

- 11) Mean of Platts West India Netback - 95 RON unleaded

Platts launched its Mean of Platts West India Netbacks on June 1, 2009. The MOPWIN assessment for 95 octane gasoline is derived by deducting freight costs from the assessments for the same product in Singapore. Although West India has a growing surplus of oil products for export, there remains only a sporadic flow of cargoes and insufficient local price formation to support independent spot prices on FOB West India basis. Platts therefore launched direct freight netbacks from the active trading hubs of Singapore and Japan, where daily prices are established from transparent and firm bids, offers and transactions between many active buyers and sellers. MOPWIN assessments appear on Platts Global Alert page 2021 and in the Arab Gulf/Asia Pacific Marketscan. Platts' FOB Singapore oil products assessments can be found on PGA page 6, and the West Coast India – Singapore clean freight assessments used for generating the netback values can be found on PGA page 904.

Middle East

- 12) Arab Gulf - 95 RON unleaded

Platts' benchmark gasoline netback assessment is for 95 RON unleaded gasoline on an FOB Arab Gulf basis. These assessments are determined on a netback basis from FOB Singapore 95 RON unleaded assessments using a freight rate for 30,000mt tankers. Freight rates are published daily in Platts Clean Tankerwire.

In July 2008, Platts launched FOB and CFR assessments for the spot market value of gasoline cargoes loading in the Middle East. The new assessments, which are published as a spot market

premium/discount to Platts' existing 95 octane Middle East netback assessment, reflect the value of 95 octane gasoline cargoes, typically 30,000-40,000mt each, for loading or delivery 15 to 45 days forward from the date of assessment.

Cargoes loading from all Gulf ports are considered for inclusion in the FOB assessment, with prices normalized to loadings in Fujairah and Jebel Ali.

Cargoes traded for delivery to all Gulf ports are considered for the CFR assessment, with prices normalized to Bandar Abbas.

NAPHTHA

Introduction

Platts assesses naphtha markets in the Asian and Middle East regions to reflect values prevailing at the close of the market, specifically at 16:30:00:99 Singapore time.

The numbers reflect spot prices prevailing in the assessed regions and are based primarily on bids, offers and deals done typically on a fixed-price basis.

In the cases where there are no spot bids, offers of transactions, markets may be assessed relative to other locations.

Japan

Platts assesses several time cycles for the Japan naphtha deliveries. The time cycles are reflective of half-monthly cycles. Platts publishes three cycles as follows:

- 1) 30-45 days forward
- 2) 45-60 days forward
- 3) 60-75 days forward

These assessments are rolled over on the 1st and 16th of each month. For example, on April 1, Platts assesses:

- 1) Second half May
- 2) First half June
- 3) Second half June

These assessments would be rolled over on April 16. They would then read as:

- 1) First half June
- 2) Second half June
- 2) First half July

The main assessment for Japan (Mean of Platts Japan, or MOPJ)

reflects the lows and the highs of the second and third published cycles. This maintains a consistency in the rollovers and sets the benchmark as a 45-75 day market.

Platts also assesses a spot premium or discount to reflect the value of cargoes delivered into Japan. The differential reflects the delivery of 25,000 mt cargoes in the first and second CFR Japan cycles, and is expressed as a differential against MOPJ.

Middle East

Because of general lack of outright transactions, Platts' benchmark Middle Eastern assessments are established as a freight netback. The FOB Arab Gulf assessments (for both 55,000mt (Naphtha) and 75,000mt (Naphtha LR2)), are assessed as freight netbacks from MOPJ.

Platts uses its daily assessments of the freight market (published in the Platts Clean Tankerwire) to determine the netback.

Assessments are issued for clean and dirty tanker markets. In these reports, freights are assessed and fixtures are listed, alongside with comments of the important factors moving the freight markets.

Platts also assesses a spot premium or discount to reflect the value of cargoes of typically 80,000mt bought and sold in the Middle East market itself. This differential is to be applied against the 55,000mt, FOB AG naphtha netback from MOPJ. Platts considers bids, offers, transactions, and reports of transactions when assessing this local spot market differential.

India

Platts launched its Mean of Platts West India Netbacks on June 1, 2009. The MOPWIN assessment for naphtha gasoline is derived by deducting freight costs from the assessments for the same product in Japan. Although West India has a growing surplus of oil products for export, there remains only a sporadic flow of cargoes and insufficient local price formation to support independent spot prices on FOB West India basis. Platts therefore launched direct freight netbacks from the active trading hubs of Singapore and Japan, where daily prices are established from transparent and firm bids, offers and transactions between many active buyers and sellers. MOPWIN assessments appear on Platts Global Alert page 2021 and in the Arab Gulf/Asia Pacific Marketscan. Platts' Japan naphtha assessments appear on PGA page 43, and the West Coast India – Japan clean freight assessments used for generating the netback values can be found on PGA page 904.

Singapore

Platts' assessments for naphtha in Singapore share some of the characteristics of both the Middle East and Japan assessments. Most of the deals in Singapore are done on a floating basis, although at times fixed-price activity is observed. Both floating and outright prices in Singapore are reflected in the spot naphtha assessment.

Platts spot premium assessment includes fixed-price deals, fixed-price bids and offers and floating transactions of a minimum of 100,000 barrels and up to 250,000 barrels loading in one berth in its spot Singapore assessment. The closing window is 16:30:00:99 Singapore time and all the transactions up to that time will be considered in the assessments.

The Singapore naphtha assessment typically follows prices prevailing in other large consuming markets such as Japan and Korea, minus an assessed freight rate. The Singapore assessment price therefore has a “floor” established by those importing centers.

In all these calculations, the gravity of the naphtha is a critical issue as most end users are concerned with the price of their commodities, which are valued on a weight basis.

Platts has traditionally used a conversion factor in its calculation of 9 barrels per metric tonne. This reflects the stated 0.65 to 0.74 gravity as per our guide for specifications.

The benchmark FOB Singapore naphtha assessment is established using a freight netback from Japan. Platts converts the naphtha assessed in Japan in dollars per tonne to dollars per barrel. The conversion is done using a 9 bbl per metric tonne factor. The calculation is as follows:

((First published cycle in Japan minus Singapore-Japan freight)/9) -0.05

The assessed freight is for a medium range vessel of 30,000 tonnes. Port charges, otherwise imposed in Japan, are deducted in the FOB Singapore naphtha assessment and are set at 0.05cts per barrel.

Please also note that the implicit contango or backwardation between the cycles is also taken into account.

Platts FOB Singapore naphtha assessments are for 15-30 days from publication on a rolling basis.

Thus on April 20, Platts would be assessing May 5 through May 20.

In a typical example:

As for April 15:

Price in Japan: 1349.00-1349.50 (2nd half May)

Less freight: 30.000

FOB Singapore: 1319.25

Barrel basis: 146.58

Less costs: 146.53 or 146.50-146.55

On the day of the rollover of the cycles in Japan, that is, on the

1st and the 16th of the month, the FOB Singapore assessment will absorb the backwardation or contango of the lapsed cycle in Japan for five days inclusive of Saturday and Sunday. For example, on April 16, the contango between second half May and first half June is \$0.25/mt and remains constant throughout the five days. Platts factors in this contango on declining scale until April 20:

Day of month: 1st	2nd	3rd	4th	5th	6th onwards
Day of month: 16th	17th	18th	19th	20th	21st onwards
	100%	80%	60%	40%	20% 0

JET/KEROSENE

Singapore

Singapore jet/kerosene assessments are based on latest UK Defence Standard specifications (the latest Defstan 91-91 **at the time of publishing was issue 6, as published July 8, 2008**). Specific gravity is typically 0.8 g/m. Singapore smoke point is typically 19-21, and premiums may be paid for higher smoke point and discounts for lower smoke point. Color specification for FOB Singapore cargoes reflect a minimum of 18 Saybolt color guarantee.

The Singapore physical assessment reflects transactions, bids/offers of a minimum of 100,000 bbl, maximum 250,000 bbl, loading 15-30 days from date of publication. Market participants should specify loading for a five-day date range. Seven days prior to loading, seller must declare terminal and buyer nominates vessel with buyer narrowing loading window to three days, subject to terminal’s acceptance. For additional information on Platts page 190 and specific methodology issues see **Platts Asia-Pacific Methodology**.

The FOB Singapore premium/discount assessment takes into account physical cargo activities 15 to 30 days from date of publication.

The Singapore jet paper assessment reflects a minimum of 50,000 bbl paper transactions. Assessments for paper are for one and two months forward and are assessed on a full calendar month basis. As an example, during the month of February, Platts would assess paper for March and for April. Paper jet kerosene is a non-deliverable contract.

Arab Gulf

FOB Arab Gulf is assessed on a netback basis from the benchmark FOB Singapore assessment using 55,000mt and 80,000mt (LR2) ship freight rates. Freight rates reported in the Platts clean tanker reports are used. It may also be assessed independently depending on spot cargo movement and competing barrels from other areas. For the freight calculation see attachment Asian Freight Calculation.

India

Platts launched its Mean of Platts West India Netbacks on June 1, 2009. The MOPWIN assessment for jet fuel is derived by deducting freight costs from the assessments for the same product in Singapore. Although West India has a growing surplus of oil products for export, there remains only a sporadic flow of cargoes and insufficient local price formation to support independent spot prices on FOB West India basis. Platts therefore launched direct freight netbacks from the active trading hubs of Singapore and Japan, where daily prices are established from transparent and firm bids, offers and transactions between many active buyers and sellers. MOPWIN assessments appear on Platts Global Alert page 2021 and in the Arab Gulf/Asia Pacific Marketscan. Platts' FOB Singapore oil products assessments can be found on PGA page 6, and the West Coast India – Singapore clean freight assessments used for generating the netback values can be found on PGA page 904.

Japan

The C+F Japan assessment is based on the latest DERD specifications (the latest Defstan 91-91 **at the time of publishing was issue 6, as published July 8, 2008**). Color typically sold into Japan is around 20-21. Platts surveys the market to determine the tradable levels for delivered medium ranges vessels with the assessment made for C+F Chiba Japan. Most cargoes trade on a Mean of Platts Singapore (MOPS) basis plus a differential.

Korea

Korea jet fuel is assessed on a FOB Korea basis reflecting the latest DERD specifications (the latest Defstan 91-91 at the time of publishing was issue 6, as published July 8, 2008). Platts surveys the market to determine the tradable levels for cargoes loading 15-30 days forward.

China

Jet fuel is assessed on a C+F basis main ports including Qing Huang Dao, Shanghai and Huangpu. Assessments reflect medium range vessels ranging from 25-45,000 mt each. Cargoes reflect saybolt color of minimum 20. Cargoes typically trade based on the mean of Platts Singapore (MOPS.)

Australia

Jet fuel is assessed on a C+F Sydney/Melbourne basis. Assessment reflects cargoes which meet the latest DERD specifications (the latest Defstan 91-91 at the time of publishing was issue 6, as published July 8, 2008) and for medium range vessels. The assessments are based on Singapore plus applicable freight.

All jet/kerosene assessments are assessed on a US dollars per barrel basis.

GASOIL

Singapore

- 1) Singapore – 0.5% sulfur (5000 ppm)
- 2) Singapore – 0.25% sulfur (2500 ppm)
- 3) Singapore – 0.05% sulfur (500 ppm)

Platts FOB Singapore 0.5% sulfur specs

Property	Standard
Density at 15 Deg C	0.82 - 0.87
Color Max	2.0
Flash Point Min	66 Deg C
Pour Point Max	9 Deg C
Copper Corrosion 3 hrs Max	1.0
Water and Sediment Max	0.05%
Sulfur Max	0.50%
Distillation Max	370
Cetane Min	48
Total Acid Number Max	0.5
Viscosity	1.7-5.5 max
Ash Max	0.01
Conradson Carbon Residue Max	0.10

Platts FOB Singapore 0.05% sulfur specs

Property	Standard
Density at 15 Deg C	0.82-0.86
Color Max	2.0
Flash Point Min	66 Deg C
Pour Point Max	9 Deg C
Copper Corrosion 3 hrs Max	1.0
Water and Sediment Max	0.05%
Sulfur Max	0.050%
Cetane Number Min	48
Total Acid Number Max	0.5
Viscosity	2.0min-4.5max
Ash	0.01 max
Dist 90% Recovered Deg C Max	357
Dist 95% Recovered Deg C Max	370
Appearance	Visually clear & Free from Undissolved Water or Sediment
Lubricity (HFRR) MIRCONS MAX	460
Filter Blocking Tendency Max	1.4
Cloud point Deg C Max	8
Carbon Residue Max	0.2%

Platts FOB Singapore 50ppm sulfur gasoil specs

Property	Standard
Density at 15 Deg C	0.820-0.860
Viscosity	2.0min-4.5max
Color Max	2.0
Carbon Residue	0.05% max
Flash Point Min	66 Deg C
Ash	0.01 max
Pour Point Max	9 Deg C
Appearance	Visually clear & Free from Undissolved Water or Sediment
Copper Corrosion	3 hrs Max 1.0
Sulfur Max	0.0050%
Dist 95% Recovered Deg C	Max 360
Cetane Number	Min 51
Lubricity (HFRR) MIRCONS MAX	460
Water and Sediment Max	0.05%
Filter Blocking Tendency Max	1.4
Total Acid Number Max	0.5
Polyaromatic Hydrocarbons Max	11%
Cloud point Deg C Max	0

4) Singapore – 0.005% sulfur (50 ppm)

5) Singapore – 0.001% sulfur (10 ppm)

In Singapore, several grades of gasoil are assessed ranging from 0.001 to 0.5% sulfur.

The Singapore physical gasoil assessments reflect a minimum of 150,000 bbl, maximum 250,000 bbl, loading 15-30 days from the date of publication. Market participants should specify loading for a five-day date range. Seven days prior to loading, seller must declare terminal and buyer nominates vessel with loading window narrowed to three days, subject to terminal's acceptance.

Platts FOB Singapore 0.25% sulfur specs

Property	Standard
Density at 15 Deg C	0.82 - 0.86
Color Max	2.0
Flash Point Min	66 Deg C
Pour Point Max	6 Deg C
Copper Corrosion	3 hrs Max 1.0
Water and Sediment Max	0.05%
Sulfur Max	0.25%
Dist 90% Recovered Deg C Max	360
Cetane Min 48	
Total Acid Number Max	0.5
Viscosity	2-4.5 max
Ash Max	0.01
Conradson Carbon Residue Max	0.10

Platts FOB Singapore 10ppm sulfur specs

FOB Singapore 10 ppm diesel specifications	Test Methods	Parameters & Units
Appearance @ 25 degrees C	ASTM D4176 Proc 2	Max 1
Ash content	ASTM D482, EN ISO 6245	Max 0.01% Wt
Carbon residue (10% distillation)	ASTM D4530, EN ISO 10370	Max 0.2% mass
Cetane Index	ASTM D4737, EN ISO 4264	Min 46
CFPP (Cold filter plugging point)	EN 116 / IP 309	Max -5 degrees C
Cloud point	ASTM 2500, ISO 3015-92, JIS K 2269-87, EN 23015	Max -1 degrees C
Colour	ASTM D1500 / IP 196	Max 2
Conductivity @ 20 degrees C	ASTM D2624, EN ISO 6297:1997	Min 150 pS/m
Copper corrosion (3 hrs @ 50 C)	ASTM D130, EN ISO 2160	Max Class 1
Density @ 15 C g/ml	ASTM D4052, EN ISO 3675	Min-Max 0.820-0.845
Distillation T95	ASTM D86, EN ISO 3405:1998	Max 360 degrees C
Distillation % volume recovered @ 250 C	EN ISO 3405:1998	Max 65.0%
Distillation % volume recovered @ 350 C	EN ISO 3405:1998	Min 85.0%
Filter blocking tendency	IP 387	Max 2.0
Flash point	ASTM D93, EN 22719	Min 64 degrees C
Lubricity (corrected wear scar diameter @ 60 C)	IP 450, ISO 12156-1	460 microns
Odour		Merchantable
Oxidation stability	ASTM D2274, EN ISO 12205	Max 25 mg/L
Particulate matter	EN 12662	Max 24 mg/kg
Polyaromatic hydrocarbons (PAHs)	IP 391:1995	Max 11% weight
Sulfur content	ASTM D5453, EN ISO 20846/7 & 20884	Max 10 ppm
Viscosity @ 40 degrees C	ASTM D445, EN ISO 3104	Min-Max 2.0-4.5 cSt
Water content	EN ISO 12937	Max 100 mg/kg
Water & sediment	ASTM D2709	Max 0.05% volume

Platts started publishing the value of the Exchange of Futures for Swaps from May 18, 2009. EFS contracts measure the difference in value between ICE's European gasoil futures contract and Singapore gasoil swaps that are settled using Platts' physical gasoil assessments. Both ICE futures and the EFS itself are expressed in dollars per metric ton. EFS assessments are provided for the prompt three calendar months. So on June 1, Platts would assess June, July and August gasoil futures; Platts would also publish a balance June, July and August EFS. Platts would no longer list the balance month EFS after the 15th of the month, when balance month swaps are no longer assessed. Platts would list futures until they expire on the exchange. Platts' valuation of futures contracts at the close of trading in Singapore represents Platts' assessment of each contracts value based upon bids, offers and trades on the exchange at precisely 16:30:00:99.

China

6) China

The minimum volume assessed is 100,000 bbl or 10-15,000mt. The sulfur content of the gasoil cargoes assessed for delivery into China is 0.50 % and 0.20% maximum. Ports are South China-Huangpu, Hong Kong, Shenzhen. Deals into other areas are tracked but prices are different. Gasoil into North China may command a higher price due to geographical location. Assessment window is 15-30 days from date of publication.

Japan

7) Japan – 0.50% sulfur, FOB

8) Japan – C+F

Japan gasoil is assessed on a FOB Japan basis reflecting cargoes with 0.50% sulfur maximum. Platts surveys the market to determine the tradable levels for cargoes loading 15-30 days forward. Most cargoes trade on a **Mean** of Platts Singapore (MOPS) basis plus a differential.

Korea

9) Korea – 0.50% sulfur FOB

Korea gasoil is assessed on a FOB Korea basis reflecting the 0.50% sulfur maximum grade. Platts surveys the market to determine the tradable levels for cargoes loading 15-30 days forward.

Arab Gulf

10) Arab Gulf - 0.50% sulfur

11) Arab Gulf - 0.25% sulfur

12) Arab Gulf - 0.05% sulfur

FOB Arab Gulf gasoil 0.50% sulfur is assessed as a netback to Singapore Gasoil Reg 0.50% sulfur assessment using 55,000mt and 80,000mt (LR2) freight rates. Freight rates reported in the

FOB Southeast Asia biodiesel specifications

Property	Standard
Ester content % (m/m)	Min 96.5
Cold Filter Plugging Point (deg Celcius)	Max 12
Pour Point (deg Celcius)	Reported
Moisture mg/kg	Max 500
Acid Value kg KOH/kg	Max 0.5
Iodine Value g J2/100g	Max 120
Oxidation Stability @ 110 deg Celcius h	Min 6
Methanol Content % (m/m)	Max 0.2
Ash Content gew-%	Max 0.02
Kinematic Viscosity @ 40 deg Celcius mm2/S	3.5-5.0
Pollution mg/kg	Max 24
Total Glycerine % (m/m)	Max 0.24
Free Glycerine % (m/m)	Max 0.02
Diglyceride Content % (m/m)	Max 0.2
Triglyceride Content % (m/m)	Max 0.2
Monoglyceride Content % (m/m)	Max 0.8
Linolenic Acid Methyl Ester % (m/m)	Max 10
Density @ 15 deg Celcius kg/m3	860-900
Flash Point deg Celcius	Min 130
Sulfur Content mg/kg	Max 10
Cetane Number	Min 51
Copper Strip Corrosion (3h@50 deg) rating	1
Phosphor Content mg/kg	Max 10
Carbon Reside (10% Dist) % (m/m)	Max 0.3
Natrium & Kalium mg/kg	5
Calcium & Magnesium mg/kg	5

Platts clean tanker reports are used for this netback. For the freight calculation see attachment Asia freight calculation. The FOB Arab Gulf 0.25% gasoil assessment is derived from the Gasoil Reg 0.50% assessment plus its differential, while the FOB Arab Gulf 0.05% sulfur assessment is derived using the 0.25% assessment plus a differential.

The FOB Singapore and Arab Gulf gasoil premium/discount assessments take into account all activities transacted 15 to 30 days from date of publication.

India

13) Mean of Platts West India Netback - 0.25% sulfur (2500 ppm)

14) Mean of Platts West India Netback – 0.05% sulfur (500 ppm)

15) Mean of Platts West India Netback – 0.001% sulfur (10 ppm)

Platts launched its Mean of Platts West India Netbacks on June 1, 2009. The MOPWIN assessments for 10ppm, 500ppm and 0.25% sulfur gasoil are derived by deducting freight costs from the assessments for the same product in Singapore. Although West India has a growing surplus of oil products for export, there remains only a sporadic flow of cargoes and insufficient local price formation to support independent spot prices on FOB West

Singapore's Standard Specs for 180 centistoke Fuel Oil, 3.5% sulfur

Property	Standard
Sulfur Max	3.5%
Kinematic viscosity Max	180 CST
Specific gravity at 15 C kg/l Max	0.991
Flash point Min	66 deg C
Pour point Max	24 deg C
Ash on a weight basis Max	0.10%
Conradson carbon residue (CCR) Max	16%
Vanadium Max	200 parts per million (ppm)
Sodium Max	100 ppm
Aluminium + Silicon Max	80 ppm with aluminium at Max 30 ppm
Water by distillation volume Max	0.50%
Sediment by extraction Max	0.10%
Total existent sediment	0.10%

Singapore's Standard Specs for 180 centistoke Fuel Oil, 2.0% sulfur

Property	Standard
Sulfur Max	2.0%
Kinematic viscosity Max	180 CST
Specific gravity at 15 C kg/l Max	0.991
Flash point Min	66 deg C
Pour point Max	24 deg C
Ash on a weight basis Max	0.10%
Conradson carbon residue (CCR) Max	16%
Vanadium Max	95 parts per million (ppm)
Sodium Max	65 ppm
Aluminium + Silicon Max	80 ppm with aluminium at Max 30 ppm
Water by distillation volume Max	0.50%
Sediment by extraction Max	0.10%
Total existent sediment	0.10%

Singapore's Standard Specs for 380 centistoke Fuel oil

Property	Standard
Sulfur Max	4.0%
Kinematic viscosity Max	380 CST
Specific gravity at 15 C kg/l Max	0.991
Flash point Min	66 deg C
Pour point Max	24 deg C
Ash on a weight basis Max	0.10%
Conradson carbon residue (CCR) Max	18%
Vanadium Max	300 parts per million (ppm)
Sodium Max	100 ppm
Aluminium + Silicone Max	80 ppm
Water by distillation volume Max	0.50%
Sediment by extraction Max	0.10%
Total existent sediment	0.10%

India basis. Platts therefore launched direct freight netbacks from the active trading hubs of Singapore and Japan, where daily prices are established from transparent and firm bids, offers and transactions between many active buyers and sellers. MOPWIN assessments appear on Platts Global Alert page 2021 and in the Arab Gulf/Asia Pacific Marketscan. Platts' FOB Singapore oil products assessments can be found on PGA page 6, and the West Coast India – Singapore clean freight assessments used for generating the netback values can be found on PGA page 904.

Australia

16) Australia – 0.001% sulfur

Platts assesses 10ppm gasoil on a C+F Sydney/Melbourne basis, in US dollars per barrel. The assessment reflects cargoes for medium range vessels. The assessment is based on Singapore plus applicable freight.

BIODIESEL

Platts assesses physical biodiesel spot cargo values in Southeast Asia. Assessments include all biodiesel traded on a spot basis within Southeast Asia at typical loading ports in Singapore, Malaysia and Indonesia, and all values are normalized back to the three key biodiesel ports closest to the tip of the Malacca Straits: Singapore, Pasir Gudang and Dumai.

The assessment reflects cargoes of between 2,000 mt and 10,000 mt loading 15-30 days from date of publication. Sellers are encouraged to offer cargoes with port defined, but where a seller offers a cargo on an FOB Straits or FOB Southeast Asia basis, port declaration would be expected to occur no later than 10 days prior to loading.

Biodiesel assessments are on a US dollars per metric ton basis.

FUEL OIL

Platts assesses physical fuel oil spot cargo values in Singapore, Japan, China, Korea and the Arab Gulf

Singapore	180 centistoke, 3.5% sulfur, FOB
	180 centistoke, 2.0% sulfur, FOB
	380 centistoke, 4.0% sulfur, FOB
China	180 centistoke, 3.5% sulfur, C+F
	380 centistoke, 3.5% sulfur, C+F
Korea	180 centistoke, 1.5% sulfur, FOB
	180 centistoke, 3.5% sulfur, FOB
	380 centistoke, 3.5% sulfur, FOB
Japan	180 centistoke, 3.5% sulfur, C+F
	180 centistoke, 3.5% sulfur, FOB Okinawa
	180 centistoke, 1.5% sulfur, FOB Okinawa

Arab Gulf 180 centistoke, 3.5% sulfur, FOB

Singapore

Singapore 180 centistoke, 3.5% sulfur, FOB
 180 centistoke, 2.0% sulfur, FOB
 380 centistoke, 4.0% sulfur, FOB

Platts assesses 2.0% and 3.5% sulfur 180 centistoke grades FOB Singapore. Platts also assesses 380 centistoke with a 4.0% sulfur content. All fuel oil assessments are typically based on cracked material. In Singapore, the HSFO 180 and 380 CST assessments reflect transactions or bids/offers for parcels of a minimum of 20,000mt, maximum 40,000mt per transaction, loading 15-30 days from the date of publication. Market participants should specify loading for a five-day date range. Seven days prior to loading, seller must declare terminal and buyer nominates vessel and narrows loading window to three days subject to terminal's acceptance.

Platts amended the vanadium content specified for 380 CST, high sulfur fuel oil assessed in the FOB Singapore market from April 1, 2009. Platts increased the maximum specified allowable vanadium to 300 parts per million, up from a previous ceiling of 200ppm. This aligns the vanadium content in HSFO cargoes with standard quality in the bunker fuel market, which is the predominant end-use for 380CST fuel oil cargoes in Singapore.

China

China 180 centistoke, 3.5% sulfur, C+F
 380 centistoke, 3.5% sulfur, C+F

Platts assesses 180 and 380 centistoke cargoes C+F main ports in southern China, including Huangpu and Shenzhen. The assessments reflect cargoes of around 30,000 mt for delivery 15-30 days forward. These cargoes can trade linked to mean of Platts Singapore, 180 centistoke 3.5% sulfur assessment, or fixed price.

Korea

Korea 180 centistoke, 1.5% sulfur, FOB
 180 centistoke, 3.5% sulfur, FOB
 380 centistoke, 3.5% sulfur, FOB

Platts assesses 180 and 380 centistoke cargoes FOB Korea. The assessments reflect parcels of around 30,000 mt loading 15-30 days forward. These cargoes typically trade linked to mean of Platts Singapore, 180 centistoke 3.5% sulfur assessment. Platts also assesses premiums/discounts to the mean of Platts Singapore for each grade.

Japan

Japan 180 centistoke, 3.5% sulfur, C+F
 180 centistoke, 3.5% sulfur, FOB Okinawa
 180 centistoke, 1.5% sulfur, FOB Okinawa

Platts assesses 180 centistoke cargoes delivered into the Chiba

380 CST - Properties

Standard

Density at 50 degrees Celsius, kg/cubic meter	0.991 max
Kinematic viscosity at 50 degree Celsius,	380 CST
Flash point in degrees Celsius	60 min
Pour point (upper) degrees Celsius	30 max
Carbon residue percentage weight basis	18 %max
Ash on weight basis	0.15% max
Water	0.5% max
Sulfur	5.0% max
Vanadium	300 ppm max
Sodium	No guarantee
Aluminum plus silicon	80 ppm max
Total Sediment Potential	0.10% max

180 CST - Properties

Standard

Density at 50 degrees Celsius, kg/cubic metre	0.991 max
Kinematic viscosity at 50 degree Celsius,	180 CST
Flash point in degrees Celsius	60 min
Pour point (upper) degrees Celsius	30 max
Carbon residue percentage	15% max
Ash on a weight basis	0.10% max
Water	0.5 % max
Sulfur	5.0% max
Vanadium	200 ppm max
Sodium	No guarantee
Aluminum plus silicon	80 ppm max
Total Sediment Potential	0.10% max

area and FOB Okinawa. The C+F Japan assessment is a netback from the FOB Singapore 180 CST assessment using 80,000mt freight rates published in the Platts dirty tanker reports. For specific methodology see attachment Asia freight calculation. The assessments reflect parcels of around 30,000 mt loading 15-30 days forward. These cargoes typically trade linked to mean of Platts Singapore, 180 centistoke 3.5% sulfur assessment. Platts also assesses premiums/discounts to the mean of Platts Singapore for FOB Okinawa.

Arab Gulf

Arab Gulf 180 centistoke, 3.5% sulfur, FOB

The Arab Gulf fuel oil 180 CST assessment is a netback to Singapore using 80,000mt freight rates. Freight rates reported in the Platts dirty tanker reports are used to derive the FOB Arab Gulf fuel oil assessment. For specific methodology see attachment Asia freight calculation. It may also be assessed independently depending on spot cargo movements and competing barrels from other areas. Density in the Arab Gulf varies and assessments include 0.96-0.975.

Arab Gulf 380 centistoke 4% sulfur, FOB

The Arab Gulf fuel oil 380 CST assessment is assessed as a netback to Singapore using 80,000mt freight rates. Freight rates reported in the Platts dirty tanker reports are used to derive the FOB Arab Gulf fuel oil assessment. For specific methodology see attachment Asia freight calculation. It may also be assessed independently depending on spot cargo movements and competing barrels from other areas

Prices for all fuel oil assessments are assessed on a US dollars per metric ton basis.

LSWR

Platts assesses Low Sulfur Waxy Residue FOB Indonesia. The assessment reflects standard Indonesian quality LSWR: a maximum sulfur content of 0.2%; API gravity of 20.5-29.5; maximum pour point 120; and viscosity 36-150 CST maximum at 50 degrees Celsius. Platts observes activity in the mixed/cracked LSWR and the V500 markets, and applies normalization procedures where necessary for assessment purposes.

Market participants should specify a five-day loading date range in bids and offers. At least ten days prior to loading, the seller must declare the terminal when no load port is stated at the point of sale. The buyer must nominate a vessel at least seven days prior to loading, at which time the buyer also narrows the loading window to three days, subject to terminal acceptance. In cases where the load terminal is stated at point of sale, the buyer must still nominate the vessel at least seven days prior to loading.

MTBE

The assessment reflects product with a minimum purity of 98%, maximum water content of 1,000 ppm and a maximum methanol content of 1.5% of the total weight. The minimum cargo size reflected is 1,000 mt. The loading time is 20-40 days forward. The assessment is FOB Singapore in \$/mt.

PLATTS FREIGHT METHODOLOGY IN ASIA (2009 RATES)

The following document contains the methodology for product netbacks used in Asia-Pacific.

Please note that the flat rates are changed once a year on the first working day of the new year and are applicable till the last working day of the year. Platts publishes freight spot assessments for dirty and clean tankers. The freight assessments are published primarily as percentages against a Worldscale (WS) rate.

In the following examples, the flat rate is multiplied against the flat base rate to obtain the actual freight cost. For example, a Worldscale rate of 200 implies a rate that is twice the base rate.

This document outlines Platts' freight methodology for gasoline, naphtha, fuel oil, gasoil/jet kero and Australian netback assessments.

Gasoline freight methodology

Singapore to Jebel Ali at 10.34 (Quoin Island to Singapore + Jebel Ali to Quoin Island)	
FOB AG 95 RON:	
Jebel Ali to Quoin Is	= 0.81
Quoin Is to Singapore	= 12.86
Jebel Ali port charges	= 0.68

TOTAL	= 14.35

THUS: Spot WS x 14.35 / 8.5 =

TO CONVERT BETWEEN METRIC TONS AND BARRELS use 8.5.

Naphtha freight methodology

1. Singapore netback

Freight rate methodology for Singapore to Japan:

Base rate from Singapore to Chiba, Japan equals \$12.63/mt
Formula: Spot WS x 30 / 26.25 x 12.63 =

2. Arab Gulf netback

Quoin Island to Chiba/Yokohama base rate equals \$24.66/mt	
Jubail/Mina Al Ahmadi to Quoin Island	2.44 + 0.27 = 2.71
Shuaiba/Ras Tanura to Quoin Island	2.53
Ruwais/Mina Abdulla to Quoin Island	2.87

	8.11 / 3 = 2.70

AG to Chiba = Base rate Quoin Island to Chiba/Yokohama
24.66
plus average of 6 ports to Quoin Island 2.70
Total: \$27.36/mt

Formula: Freight = Spot WS x 55 / 52.50 x 27.36

For Naphtha LR2 netback:
Spot 75,000mt: Freight = Spot WS x 27.36

Fuel Oil freight methodology

1. Japan netback

Singapore to Chiba/Yokohama, Japan: The freight rate is \$13.71/mt. This amount is multiplied by the worldscale rate between Singapore and Japan. The amount is then added to the Singapore fuel oil assessment.

Formula: Freight = Spot WS x 13.71

2. Arab Gulf netback

Quoin Island to Singapore: \$12.86/mt plus \$2.07/mt for the additional expense to the loading port (In this case, Mina al Ahmadi is used as a typical port).

This yields a net freight cost of \$14.93/mt. This amount of \$14.93/mt should be used for the AG freight netback calculation.

Formula: Freight = Spot WS x 14.93 =

Gasoil/Kerosene freight methodology

Singapore - Arab Gulf netback calculations.

Singapore + Quoin Island + four port average discharge (Ras Tanura, Bahrain, Jubail and Mina al-Ahmadi) + any additional port charges.

Singapore to Quoin Island	\$12.86/mt
Quoin Island to Jubail	(1.41 + 0.27) x WS
Quoin Island to Bahrain	(1.52) x WS
Quoin Island to Ras Tanura	(1.42) x WS
Quoin Island to Mina al-Ahmadi	(2.07) x WS

Formula: (1.67 + 12.86 = 14.53) x WS

The final calculation is divided by 7.45 for gasoil and 7.9 for jet kero to convert \$/mt into \$/bbl.

Australian netback assessments

Base freight rate from Singapore to Melbourne/Sydney, Australia is \$19.28/mt.

To obtain the actual freight Platts will determine the spot rate from Singapore to Australia times 19.28 and then the result will be divided by the conversion rate to equate from metric tonne to barrel basis.

1) C+F Australian Mogas:
Spot WS x 19.28 / 8.5 =

2) C+F Australia Gasoil:
Spot WS x 19.28 / 7.45 =

3) C+F Australia Jet:
Spot WS x 19.28 / 7.9

Spot worldscale rates are available on Platts Global Alert page 136 for clean rates and Platts Global Alert page 137

ASIA PACIFIC-ARAB GULF BUNKER ASSESSMENTS

Platts assesses gasoil and fuel oil bunkers in Singapore, Japan, Korea, Australia, Fujairah and Hong Kong. Platts also publishes posted bunker prices for China and Taiwan. Platts assesses ex-wharf fuel oil bunkers in Singapore.

Singapore Bunkers: Same specifications as Platts current bunker specs. Prices reflect for 180 CST, 300-500mt lots. Larger volumes might be reflected at the low end of the assessment range. For 380 CST, volumes are typically 500-1,000mt. MDO typically is for 50-100mt lots. The timing is for material delivered three to seven days from date of publication. Prices are on a delivered basis and include barging cost.

Hong Kong Bunkers: Same specifications as Platts current bunker specs. Prices reflect for 180 CST, 300-500mt lots. Larger volumes might be reflected at the low end of the range. For 380 CST, volumes are typically 500-1,000mt. MDO typically is for 50-100mt lots. The timing is for material delivered with three to seven days from date of publication. Prices are on a delivered basis and include barging cost.

Platts Ex-Wharf Singapore Fuel Oil Bunkers Specifications

Platts ex-wharf Singapore fuel oil bunker assessments reflect spot trading activity 3 to 15 days from the date of publication. The assessments will reflect trading activity up to 5.30 PM Singapore time. Transactions of between 1,000 mt and 6,000 mt per parcel, will be taken into account for assessment purposes. Buyers/sellers must specify a loading laycan of 3 days. Platts will track activity in Malaysia's Pasir Gudang terminal as well. Platts will reflect bids/offers issued up to 5.00 PM Singapore time, and will track changes in the bids or offers up to 5.25 PM Singapore time. The real time market information will be available on Platts Marine Alert pages 997-998. The assessments will be published on Platts Marine Alert page 980 and 986 and on the Platts Oilgram Bunkerwire.

Platts has surveyed the market and found several standards typically used by the bunker traders. If you have any questions or comments please email Paul Young (paul_young@platts.com) or call him at the Platts Singapore office on: +65-6530-6517.

Product Specifications

380 centistoke and 180 centistoke fuel oil bunker product specification should meet the following specifications.

Note: Should an issue arise regarding a new standard or a new specification, Platts would then survey the market and determine the appropriate typical specification.

Platts has surveyed the market and found several standards typically used by the bunker traders. A sample of those standards follows:

Delivery

Parcel to be supplied on an ex-wharf basis one safe terminal, off-shore delivery but within the Port of Singapore limits to buyer's nominated vessel/barge. Inter/in Tank Transfer (ITT) is also acceptable.

Barge Nomination

The buyer will nominate the barge/vessel between two to five working days in advance of the load date as per current industry practices at the various load terminals.

Barge Acceptance

The seller will notify the buyer of barge acceptance promptly and within a reasonable time. But the acceptance is subjected to terminal availability.

Terminalling Penalty

In the event of the buyer being unable to load the purchased parcel within the contractual loading date range, a surcharge will be applied. The surcharge is in the amount of \$0.60 (US Dollars Zero Point Six Zero) per metric ton per seven calendar days. The surcharge shall be imposed on any unlifted quantity after the last day of the contractual loading date range (last day of the contractual loading date range shall count as day zero).

Merchantability

Seller should supply material that is merchantable.

Mooring/Wharfage/Piloting

Any cost associated with the barge transportation shall be borne by the buyer.

Determination of Quantity and Quality

Quantity and quality shall be based on certificate of quantity and quality issued by seller's loading terminal. In the event of a dispute, seller and buyer to jointly appoint a mutually acceptable independent inspector to determine quality and quantity based on loading samples and figures. If an issue arises over the surveyor, either party has the right to appoint an additional surveyor. Cost of appointing mutual inspector shall be equally shared between buyer and seller.

Demurrage

Not Applicable, but seller is to supply cargo within reasonable time.

Tolerance

Industry standards allow for an operational tolerance level on

quantity of plus/minus five percent.

Title and Risk

Title and risk of product shall pass to buyer when oil passes buyer's vessel/barge permanent flange connection at loading terminal or mother vessel in the event of barge to barge loading.

Payment

Payment shall be made in US dollars in accordance to previously established payment practices. These payment practices include full invoice value by telegraphic transfer, cheque, and by collection within thirty days from the date of loading (i.e. Date of certificate of quantity from loading terminal). Date of loading to count as Day One. Payment shall be made without withholding, deduction, discount, counter claim or offset of any kind against presentation of seller's invoice.

All bank charges at the buyer's bank will be borne by the buyer's account.

All bank charges at the seller's bank will be borne by the seller's account.

If payment falls due on a Sunday or Monday New York banking holiday, payment shall be made on the immediate following banking day. Payment falling due on a Saturday or non-Monday banking holiday in New York shall be made on the previous banking day.

In the event that payment was not settled against invoice on the due date, then without prejudice to the application of any provisions hereof and / or to any other remedy available to buyer herein or otherwise, buyer shall pay interest on the overdue amount at the prime lending rate assessed. Typically a US dollar interest rate reflecting the average of four major banks in Singapore or a major bank are used. In addition, seller adds two percent to the base rate or two percent per month which ever is higher, until and including the date of settlement is made. Payment of the interest shall be made on the same day of the overdue payment made by the buyer.

The typical industry contract adds that the following paragraph shall not be construed by the buyer as an indication of the seller's willingness to provide extended credit.

Credit terms

Buyer shall open a irrevocable standby letter of credit or banker's guarantee from a first class international bank located in Singapore in form and substance acceptable to seller and valid for a minimum duration of sixty days from the date of loading. Buyer shall open letter of credit or banker's guarantee no later than (ten) working days from the loading date. The letter of credit or banker's guarantee shall be open for an amount of at least 105% of the estimated purchase value.

Law and Arbitration

Any dispute arising in connection with this agreement, including any questions regarding its existing, validity or termination shall be referred to and resolved by arbitration in

Singapore in accordance with the arbitration rules of Singapore International Arbitration Center ('SIAC Rules') for the time being in force which rules are deemed to be incorporated by agreement of the parties and there are no oral promises, representations or warranties affecting it.

The language of the arbitration shall be English.

The validity, construction and performance of the agreement shall be governed by the law of Singapore.

Force Majeure

If either party is rendered unable by force majeure to perform or comply fully or in part with any obligations or conditions of this contract, upon such party's giving written notice to the other of such force majeure within forty eight (48) hours after receiving notice thereof, such performance or compliance shall be suspended. During the continuance of the incapacities so caused, and such party shall be relieved of liability and shall suffer no prejudice for failure to perform the same during such period.

In the event that the said period of suspension of performance shall continue in excess of thirty (30) calendar days, this contract is deemed to be canceled without liability of either party, unless otherwise mutually agreed.

As used herein, the term force majeure shall include, by way of example and not in limitation, fire, wars of belligerent action, riots or commotions, acts of God, navigational accidents, vessel/barge damage or loss, accidents at or closing of navigation or transportation mechanism, strikes, grievances, or actions by among workers, lock-outs, other labor disturbances, explosions or accidents to wells, pipelines, storage depots, refinery facilities, machinery and other facilities, actions of any government, or by any person purporting to represent a government, or other cause not reasonable within the control of the respective parties.

FAQ

1. What time standard does Platts follow?

Platts follows the Singapore standard time. Platts aligns its clocks daily with an atomic clock to ensure that all of its computers are displaying the proper time.

2. If, as a subscriber, I believe I called on time based on my wristwatch to submit a bid/offer for Platts page 190, would Platts recognize my entry?

If the subscriber's clock and the Platts clock are out of alignment, Platts will follow its own clock.

3. If a subscriber calls on time but the lines are too busy and Platts only picks it up after time, would Platts recognize the entry?

No. Platts will only recognize the entry if it is communicated to Platts on time. If a user is concerned about communicating the information on time, he/she should allow some time for the delivery of the communication.

4. Does Platts have alternatives for phone communication, in the event that the lines are jammed?

Yes, Platts provides subscribers the options of communicating their information using the internet. Platts provides support to customers that would like to use AOL's **Instant Messenger** or **Yahoo Instant Messenger**. Please communicate with the Singapore editorial office to arrange for setting up instant messaging at 65-6530-6517.

5. If my company has a firewall and I can't use messaging systems what are my alternatives?

Platts may be able to work with your companies IT department to provide a link through the firewall.

6. If I enter a bid and offer on Platts page 190, is it firm?

Platts will only publish firm bids and offers, along with the names of the buyer/s or seller/s, on Platts page 190 during the 1600-1630 Singapore standard time period. At other times, indicative bids and offers may be entered and the update on page 190 will note that the information is only indicative and not firm.

7. After I have entered my bid/offer can I change the price?

Yes, but only up to 1625 Singapore standard time for physical bids/offer.

8. And can I change the volume or the quality?

Platts will only recognize price changes after 1600 Singapore time. Before 1600 Singapore time, the user could change specifications, volumes, etc, which would equate to a replacement of the initial bid/offer.

9. If I change my mind can I withdraw my bid/offer?

Yes, provided that no trading counter party has indicated its willingness to execute a transaction. Platts will accept a withdrawal at any time.

10. What is Platts response if I withdraw my bid/offer after a counter party indicated its willingness to trade with me?

Platts will deem the withdrawal to have been made under duress. Any withdrawal of this nature would suggest that the provider of information was not a serious buyer/seller and his information was not reliable. Platts only reflects in its assessments information deemed reliable and only from reliable sources.

11. Do I have to be a subscriber to participate on page 190?

No. Platts interest is in determining market levels. What is of interest to Platts editorial is not whether the company is a subscriber, but whether the company is a reliable source of information.

12. What do I have to do to submit a bid/offer?

You need to communicate to Platts and demonstrate that you have market credibility with potential market counter parties. Platts will investigate whether your company has a 'good' credit standing in the marketplace. The final arbiter of your credibility standing is the market place as a counter party may elect to trade or not with your company after they have done their own credit checks.

13. Can I lose my privilege to submit bid and offers to Platts page 190?

Yes. You can lose your privilege under many circumstances. For instance, if Platts determines that your information is not reliable Platts will not post your bid/offers in any of its publications. Platts, as a responsible publisher, is only interested in publishing information that is reliable. In another case, if your company does not respect the terms and conditions prevailing at the time of sale you may lose your privilege. Furthermore, if Platts determines that buyer/seller is frustrating the transaction by making it difficult operationally or otherwise to load or discharge a cargo, you may also lose your privilege.

14. Does Platts write reports regarding operational difficulties or when information submitted was not fully correct?

Yes. Platts has many functions including a critical role in informing the market about operational difficulties, rogue market information, delays in letter credit issuance, etc.

15. If I lose my privilege to submit bids/offers, how do I gain it back?

There is no sure way to get it back. Platts is only interested in publishing reliable information. Part of the process may require higher management within your organization to communicate with Platts as to what actions your company has taken

corporately to ensure that there is no market misleading. But really there is no sure way to regain credibility once it has been lost.

16. If I disagree with the Platts reports, to whom do I complain?

The first step is the regional management. If a disagreement still continues you may contact the director for market reporting, Jorge Montepeque, or the vice president of editorial, Dan Tanz. If the dispute still remains, you may contact higher management within Platts or McGraw-Hill. List of numbers follow:

- Singapore +65-6532-2800
- London +44-20-7176-6171
- New York +1-212-904-3121

17. Is there a detailed methodology for the assessments?

Yes, and you can find it in the Platts Asia-Pacific Products Methodology.

18. Is Platts open and transparent? Can I visit the office to see the activity on page 190?

Platts assessment process is open and transparent. Its methodologies are available to our subscribers and are available also on Platts.com. Our methodologies and assessments are subject of scrutiny both internally and by our subscribers. You can also visit our offices to observe the activity on page 190. Call our office in Singapore at +65-6530-6517 for an appointment.

19. What jurisdictional law governs the contracts of the transactions that Platts takes into consideration for its assessments?

There is a dual standard in Singapore where some companies use either English or Singapore law. Both are acceptable. If a dispute arises, the customary jurisdiction used by the seller/buyer on page 190 will prevail. It is up to the counterparty to accept the terms of the original buyer/seller.

SAMPLE CONTRACTS

Asia-Pacific Sample Gasoline 97 RON Contract

TO :

ATTENTION :

FROM : XXXXX LTD

WE ARE PLEASED TO CONFIRM DETAILS OF OUR SALE TO YOU OF UNLEADED MOGAS AS AGREED BETWEEN US ON DAY-MONTH-YEAR, THE SPECIAL PROVISIONS OF WHICH ARE AS FOLLOWS:

CONTRACT NO.:

1. BUYER: COMPANY'S NAME

2. SELLER: COMPANY'S NAME

3. PRODUCT SPECIFICATION:

97 RON UNLEADED MOTOR GASOLINE WITH THE FOLLOWING PRODUCT SPECIFICATIONS:

PROPERTY	GUARANTEED	METHOD
APPEARANCE	BRIGHT N CLEAR	VISUAL
DENSITY AT 15 DEG C, KG/ L	REPORT	
RESEARCH OCTANE NUMBER (RON)	MIN 97.0 ASTM	D2699
LEAD, GPB/ L	MAX 0.01 ASTM	D3237
DISTILLATION, DEG C		ASTM D86
IBP	REPORT	
10 % EVAPORATED	MAX 74	
50 % EVAPORATED	MAX 127	
90 % EVAPORATED	MAX 190	
FINAL BOILING POINT	MAX 225	
REID VAPOUR PRESSURE, KPA	MAX 69	ASTM D323
SULPHUR, % MASS	MAX 0.10	ASTM D1266
COPPER CORROSION		
(3HRS AT 50 DEG C)	MAX 1	ASTM D130
EXISTENT GUM, MG/100ML	MAX 4	ASTM D381
INDUCTION PERIOD, MINUTES	MIN 240	ASTM D525
BENZENE, % VOL	MAX 5	GLC
MTBE, % VOL	MAX 11	GLC
DOCTOR TEST	NEGATIVE	IP 30
ALCOHOL, PCT VOL	MAX 0.5	GLC

NOTE : THERE IS TO BE NO DELIBERATE ADDITION OF ALCOHOL BUT MAY INCLUDE ETHER, MTBE UP TO SPECIFIED LIMIT.

4. QUANTITY

50,000 BBLs PLUS/MINUS 5 PERCENT AT OPERATIONAL TOLERANCE.

5. MODE/DATE OF SUPPLY

DELIVERY SHALL BE FOB ONE SAFE BERTH SINGAPORE DURING DAY, MONTH, YEAR TO DAY, MONTH, YEAR.

SELLER TO DECLARE LOADING TERMINAL/REFINERY AT LEAST 10 DAYS PRIOR TO THE FIRST DAY OF THE 5-DAY LOADING DATE RANGE.

BUYER SHALL NARROW TO A 3-DAY LOADING LAYCAN AND NOMINATE THE LOADING VESSEL WITH FULL VESSEL PARTICULARS AT

LEAST 7 DAYS PRIOR TO THE FIRST DAY OF THE 3-DAY LOADING DATE RANGE. BUYER'S NOMINATED VESSEL (WHICH MUST BE Y2K AND ISM COMPLIANCE) AND LOADING DATE RANGE SHALL SUBJECT TO TERMINAL OR REFINERY'S ACCEPTANCE.

6. PRICE

FOB PRICE WILL BE FIXED AT USD/BBL (XXX POINT XXXXX).

7. SPECIAL PROVISION

THE FOB SALES PRICE IS EXCLUSIVE OF ANY DUTIES, FEES, TAXES (INCLUDING INCOME TAXES), GOVERNMENT LEVIES, OR OTHER DIRECT OR INDIRECT TAXES AND DUTIES IMPOSED UPON BUYER BY THE GOVERNMENT OF SINGAPORE, INCLUDING PENALTIES AND INTEREST LEVIED AS A CONSEQUENCE OF NON-PAYMENT OF THE FOREGOING AND ALL OTHER CHARGES, ALL OF WHICH ARE FOR ACCOUNT OF AND SHALL BE PAID BY BUYER. BUYER UNDERTAKES TO REIMBURSE SELLER PROMPTLY UPON INVOICING, ANY SINGAPORE CUSTOMS DUTY PAID BY TERMINAL/REFINERY IN SINGAPORE FOR ANY THREE POINTS TRANSFER OF THE ABOVE CARGO (OR CARGOES) AS UNDERTOOK BY THE BUYER WITHIN THE REPUBLIC OF SINGAPORE.

8. PAYMENT

PAYMENT SHALL BE MADE IN US DOLLARS BY MEANS OF IRREVOCABLE DOCUMENTARY LETTER OF CREDIT TO A BANK NOMINATED BY SELLER OF SAME DAY FUNDS 30 DAYS AFTER THE B/L DATE (B/L DATE DAY ZERO) WITHOUT OFFSET OR COUNTERCLAIM AGAINST THE SELLER'S COMMERCIAL INVOICE (TELEX INVOICE ACCEPTABLE), COPY OF BILL OF LADING, AND ORIGINAL CERTIFICATES OF QUALITY AND ORIGIN.

THE LETTER OF CREDIT (IN SELLER'S FORMAT) WHICH SHALL BE CAUSED TO BE OPENED BY THE BUYER AT THE BUYER'S COSTS WITH A FIRST CLASS INTERNATIONAL BANK ACCEPTABLE TO THE SELLER.

THE LETTER OF CREDIT SHOULD BE RECEIVED BY THE SELLER AND AUTHENTICATED BY THE SELLER'S BANK AT LEAST THREE WORKING DAYS BEFORE THE FIRST DAY OF THREE DAY LOADING DATE RANGE. IN THE EVENT THAT THE DOCUMENTS REFERRED TO ABOVE ARE NOT AVAILABLE FOR PRESENTATION TO THE BUYER ON OR BEFORE THE PAYMENT DUE DATE THE BUYER AGREES TO PAY THE SELLER UPON PRESENTATION OF THE SELLER'S COMMERCIAL INVOICE AND THE SELLER'S LETTER OF INDEMNITY IN THE SELLER'S FORMAT. (TELEX LETTER OF INDEMNITY ACCEPTABLE). IF PAYMENT FALLS DUE ON A SUNDAY OR BANK HOLIDAY MONDAY IN NEW YORK, SUCH PAYMENT SHALL BE MADE ON THE FIRST NEW YORK BANKING DAY FOLLOWING AND IF PAYMENT FALLS DUE ON A SATURDAY OR ANY OTHER BANK HOLIDAY IN NEW YORK, SUCH PAYMENT SHALL BE MADE ON THE LAST PRECEDING NEW YORK BANKING DAY.

PAYMENT SHALL BE MADE TO XXXXXXXXXXXXXXX FOR THE ACCOUNT OF XXXXXXXXXXX

9. RISK AND PROPERTY

NOTWITHSTANDING ANYTHING HEREIN EXPRESSLY OR BY IMPLICATION TO THE CONTRARY, THE RISK AND PROPERTY IN THE PRODUCT PETROLEUM DELIVERED HEREUNDER SHALL PASS TO THE BUYER AS THE PRODUCT PASSES THE TANKSHIP'S PERMANENT HOSE CONNECTION AT THE PORT OF LOADING.

10. INDEPENDENT INSPECTION

A MUTUALLY ACCEPTABLE INDEPENDENT INSPECTOR SHALL BE APPOINTED BY THE SELLER AT THE LOADING TERMINAL AND THE COSTS THEREOF SHALL BE SHARED EQUALLY BETWEEN THE PARTIES. INDEPENDENT INSPECTOR'S FINDINGS AND RESULTS AT LOADPORT SHALL BE FINAL AND BINDING.

11. LAYTIME AND DEMURRAGE

THE TIME ALLOWED FOR THE SELLER TO LOAD THE CARGO SHALL BE 24 RUNNING HOURS. TIME TO COUNT 6 HOURS AFTER NOR OR WHEN VESSEL ALLFAST ALONGSIDE LOADPORT WHICHEVER EARLIER AND SHALL CEASE UPON HOSES DISCONNECTION. IF VESSEL ARRIVES BEFORE THE 3 DAY DATE RANGE, LAYTIME SHALL COMMENCE UPON VESSEL ALL FAST/COMPLETION OF BERTHING OF FROM 0600 HOURS ON THE FIRST DAY OF THE 3-DAY RANGE, WHICHEVER IS EARLIER. IF VESSEL ARRIVES AFTER THE 3-DAY DATE RANGE, LAYTIME SHALL COMMENCE UPON VESSEL ALL FAST/COMPLETION OF BERTHING.

DEMURRAGE RATE SHALL BE ACTUAL CHARTER PARTY RATE PRORATED FOR PART CARGO BY PURCHASED VOLUME IN METRIC TONS OVER THE SDWT OF THE VESSEL.

12. LAW AND ARBITRATION

ANY DISPUTE OR DIFFERENCE BETWEEN THE PARTIES ARISING UNDER, OUT OF, OR IN CONNECTION WITH THE AGREEMENT SHALL BE REFERRED TO AND DETERMINED BY THE ENGLISH COURTS AND PARTIES HERETO SUBMIT THEMSELVES TO THE EXCLUSIVE JURISDICTION OF THE ENGLISH COURTS. THE VALIDITY, CONSTRUCTION AND PERFORMANCE OF THE AGREEMENT

SHALL BE GOVERNED BY THE LAW OF ENGLAND.

THE CONSTRUCTION, VALIDITY AND PERFORMANCE OF THIS AGREEMENT SHALL BE GOVERNED BY ENGLISH LAW.

THE UN CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS (1980) SHALL NOT APPLY TO THIS AGREEMENT.

13. FORCE MAJEURE

NEITHER SELLER NOR BUYER SHALL BE LIABLE IN DAMAGES OR OTHERWISE FOR ANY FAILURE OR DELAY IN PERFORMANCE OF ANY OBLIGATION HEREUNDER OTHER THAN OBLIGATION TO MAKE PAYMENT. WHERE SUCH FAILURE OR DELAY IS CAUSED BY FORCE MAJEURE. BEING ANY EVENT, OCCURRENCE OR CIRCUMSTANCE REASONABLY BEYOND THE CONTROL OF THAT PARTY, INCLUDING WITHOUT PREJUDICE TO THE GENERALITY OF THE FOREGOING. FAILURE OR DELAY CAUSED BY OR RESULTING FROM ACTS OF GOD, STRIKES, FIRES, FLOODS, WARS (WHETHER DECLARED OR UNDECLARED), RIOTS, DESTRUCTION OF THE OIL, DELAYS OF CARRIERS DUE TO BREAKDOWN OR ADVERSE WEATHER, PERILS OF THE SEA, EMBARGOES ACCIDENTS, RESTRICTIONS IMPOSED BY ANY GOVERNMENTAL AUTHORITY (INCLUDING ALLOCATIONS, PRIORITIES, REQUISITIONS, QUOTAS AND PRICE CONTROLS). THE TIME OF SELLER TO MAKE OR BUYER TO RECEIVE DELIVERY HEREUNDER SHALL BE EXTENDED DURING ANY PERIOD IN WHICH DELIVERY SHALL BE DELAYED OR PREVENTED BY REASON OR ANY OF THE FOREGOING CAUSES UP TO A TOTAL OF THIRTY (30) DAYS. IF ANY DELIVERY HEREUNDER SHALL BE SO DELAYED OR PREVENTED FOR MORE THAN 30 DAYS. EITHER PARTY MAY TERMINATE THIS CONTRACT WITH RESPECT TO SUCH DELIVERY UPON WRITTEN NOTICE TO THE OTHER PARTY.

14. G.S.T.

THE BUYER SHALL ADVISE SELLER IN WRITING OF THE DESTINATION OF THE OIL SOLD UNDER THIS AGREEMENT NO LATER THAN 1 WORKING DAY PRIOR TO THE AGREED LOADING DATE, FAILING WHICH SELLER SHALL BE ENTITLED TO ASSUME THAT THE OIL IS NOT INTENDED FOR EXPORT AND GOODS AND SERVICES TAX (GST) WILL BE CHARGED AND BE FOR BUYER'S ACCOUNT.

15. OTHER TERMS

EXCEPT AS SPECIFICALLY DETAILED ABOVE, LATEST INCO TERMS TO APPLY.

16. CONTACTS

THE SELLER'S OPERATIONS CONTACT :

FINANCIAL OPERATIONS CONTACT IS :

THIS TELEX CANCELS AND SUPERSEDES ANY BROKER CORRESPONDENCE IN RELATION TO THIS AGREEMENT WHICH SHALL BE FOR THE SOLE PURPOSE OF DOCUMENTING COMMISSION, IF ANY.

WE ARE PLEASED TO HAVE CONCLUDED THIS FURTHER CONTRACT WITH YOU AND LOOK FORWARD TO RECEIVING YOUR CONFIRMATION BY RETURN TELEX THAT THE ABOVE FULLY ACCORDS WITH YOUR UNDERSTANDING OF THE AGREEMENT REACHED BETWEEN US.

BEST REGARDS

XXXXXX

Asia-Pacific Sample Gasoil Contract

We are pleased to confirm the sale of gasoil concluded on in accordance with the following terms and conditions:

1. **Seller:** Company's name
2. **Buyer:** Company's name
3. **Product:** Gasoil (0.5% Sulfur)
4. **Quantity:** 150,000 bbls plus/minus 5 pct operational tolerance.
5. **Quality:** To meet following specifications:

Specification	Limit	Test Method (ASTM)
Ash, mass pct	max 0.01	D482
Cetane Index	min 48	D976
Colour, ASTM	max 2.0	D1500
Copper Corrosion (3 hrs at 100C)	max No. 1	D130
Density at 15C	0.82 - 0.87	D1298
Flash Point, C	min 66	D93
Water and Sediment, vol pct	max 0.05	D2709
Distillation at 90% C	max 370	D86
Pour Point, C	max 9	D97
Sulfur, wt pct	max 0.5	D129 or D4294
Viscosity at 40C	cst 1.7 - 5.5	D445
Conradson Carbon Residue 10% bottom, wt pct	max 0.1	D189

6. **Delivery:** In one cargo lot FOB one safe berth Singapore during: Time specified at deal time. Buyer to narrow down a 3-day date range 7 days before the first day of 3-day date range and to nominate the loading vessel 7 days prior to the first day of the 3-day laycan. The 3-day date range declared by buyer and vessel nominated shall be subject to terminal acceptance which shall not be unreasonably withheld. Seller shall declare loading terminal 7 days before the first day of 3-day date range.

7. **Price:** Firm and fixed at U.S. Dollars per bbl (repeat USD XX.XX) FOB Singapore basis on B/L quantity.

8. **Payment:** In U.S. Dollars by an irrevocable documentary letter of credit in a format acceptable to seller established through a first class international bank acceptable to seller for payment without withhold, deduction, discount, offset or counterclaim 30 days from B/L date (B/L date to count as day zero) against presentation of seller's commercial invoice (telex invoice acceptable) and normal shipping documents.

The letter of credit must be received by seller in good order at least 3 banking days prior to the first day of the laycan.

In event that original B/L and othr usual shipping documents are not available when payment is due, payment to be effected against presentation of seller's telex commercial invoice and seller's telex letter of indemnity acceptable to buyer.

In the event payment due dates falls on a Sunday or a Monday bank holiday in New York, payment to be effected on the immediate following banking day. In the event payment due date falls on a Saturday or a non Monday banking holiday, payment to be effected on the immediate preceding banking day.

All bank charges at buyer's bank for buyer's account

All bank charges at seller's bank for seller's account.

9. **Laytime:** 36 hours Shinc based on above contractual quantity. Laytime shall commence 6 hours after NOR tendered at the loadport or upon berthing, whichever is earlier and cease upon disconnection of hoses provided vessel tenders NOR within agreed 3-day laycan. If vessel tenders NOR prior to 3-day laycan, laytime to commence at 0600 hrs or first day range or vessel all fast alongside berth, whichever is earlier. If vessel tenders NOR after the 3-day laycan, then laytime to commence when vessel all fast alongside.

10. Vessel Nomination: Buyer warrants that nominated vessel will meet port restrictions/regulations. Seller will revert terminal's acceptance or rejection of such nomination earliest possible. Buyer shall arrange for vessel to report ETA notices 72/48/24/12 hours and any changes of 3 hours before arrival loadport even if vessel is in port, stating expected date and hour of arrival. Any substitution of vessel should be in writing at least 48 hours before the first day of 3-day laycan. Any substitution of vessel less than 48 hours before the first day of 3-day laycan will be subjected to best endeavour basis.

11. Demurrage: If incurred, shall be as per actual charter party rate or demurrage rate of USD 14,000 PDPR, whichever is lower.

No claim for demurrage shall be entertained if a telex claim is not received by seller within 45 days from the date vessel completed loading and the fully documented claim is not received by seller within 60 days from the date vessel completed loading.

12. Title and Risk: To pass from seller to buyer when oil passes vessel's flange connection at loadport.

13. Insurance: If required, to be covered by buyer.

14. Warranties: The product(s) shall meet the specification as set out in this contract.

15. Determination of Quality and Quantity: A mutually acceptable independent inspector shall be appointed to witness the loading of the product at loadport with cost of such inspection to be shared equally between buyer and seller. The quality and quantity as determined by the independent inspector at loadport /assigned shore tank(s) shall be final and binding on both buyer and seller.

16. Taxes: Buyer shall pay any and all taxes, fees, duties or assessments imposed by governmental authority on the use of the product at loadport. Good and services tax, if and where applicable, shall be for the account of buyer.

17. Law and Arbitration: The governing law of this contract is Singapore law. Any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by arbitration in Singapore in accordance with the arbitration rules of the Singapore International Arbitration Centre (SIAC Rules).

18. Force Majeure: Neither seller or buyer shall be liable in damages or otherwise for any failure or delay in performance or any obligation hereunder other than obligation to make payment, where such failure or delay is caused by force majeure, being any event, occurrence or circumstance reasonably beyond the control of that party, including without prejudice to the generality of the foregoing, failure or delay caused by or resulting from act of God, strikes, fires, floods, wars (whether declared or undeclared), riots, destruction of the oil, delays of carriers due to breakdown or adverse weather, perils of the sea, embargoes, accidents, restrictions imposed by any governmental authority (including allocations, priorities, requisitions, quotas, price controls) and unexpected shut-down of production facilities and breakdown of loading facilities of seller. The time of seller to make, or buyer to receive, delivery shall be extended during any period in which delivery shall be delayed or prevented by reason of any of the foregoing causes, up to a total of thirty (30) days. If any delivery shall be extended during any period in which delivery shall be so delayed or prevented for more than thirty (3) days, either party may terminate this contract with respect to such delivery upon written notice to the other party.

19. Other terms and conditions: as per inco terms 1990 edition for FOB sales plus latest amendments.

For sake of good order, please confirm above agreement by return telex within two (2) working days, otherwise, we will assume that this contract is fully acceptable to you.

We are pleased to have concluded this transaction with you.

Regards

Seller's company name

XXXX

Email:

Tel: 65-XXXXXXX (Office)/65-XXXXXXX (DID)/65-XXXXXXX (Fax)

Hphone: XXXXXXXX

Asia-Pacific Sample Fuel Oil Contract

TO: ABC COMPANY
 FROM: SELLER
 RE: SALE OF HIGH SULPHUR FUEL OIL.

=====

FOLLOWING TELEPHONE DISCUSSION BETWEEN XXXXX AND XXXXX ON DAY XX, MONTH XX, YEAR XX, WE ARE PLEASED TO CONFIRM THE FOLLOWING CONTRACT: -

1. BUYER: COMPANY'S NAME
2. SELLER: COMPANY'S NAME
3. GRADE: HSFO 180CST
4. QUALITY:

SPECIFICATION	LIMIT	TEST METHOD
DENSITY AT 15 DEG C KG/ L	0.991 MAX	ASTM D1298/D4052
KIN. VISCOSITY CST AT 50 DEG C	180 MAX	ASTM D445
ASH, WT PCT	0.10 MAX	ASTM D482
CONRADSON CARBON RESIDUE WT PCT	16 MAX	ASTM D189/D4530
POUR POINT, DEG C	24 MAX	ASTM D97
WATER BY DISTILLATION VOL PCT	0.5 MAX	ASTM D95
FLASH POINT, DEG C	66 MIN	ASTM D93
SULPHUR, WT PCT	3.5 MAX	ASTM D4294/D2622
SEDIMENT BY EXTRACTION, WT PCT	0.10 MAX	ASTM D473
TOTAL SEDIMENT EXISTENT, WT PCT	0.10 MAX	ASTM D4870/IP375
VANADIUM, PPM	200 MAX	AAS/ICPES/IP377MOD/ASTM
D1548		
SODIUM, PPM	100 MAX	AAS
ALUMINIUM N SILICON, PPM	80 MAX	AAS/ICPES/IP377
ALUMINUM, PPM	30 MAX	AAS/IP377

5. QUANTITY: 20,000 METRIC TONNES PLUS/MINUS 5% OPERATIONAL TOLERANCE, BASIS B/L QUANTITY.
6. PRICE: FIXED AND FIRM AT USDXXX.XXPMT (REPEAT USDXXX.XX/MT) FOB SINGAPORE, BASIS B/L QUANTITY.

Asia-Pacific Sample Swaps Contract

DATE
TO:
ATTN:
CC:
ATTN:
FROM: BROKER
REF: XXXXXX

THIS IS TO SUMMARIZE THE FOLLOWING TRANSACTION CONCLUDED ON ... BETWEEN:

SELLER: COMPANY'S NAME

BUYER: COMPANY'S NAME

FIXED PRICE PAYOR: BUYER

FLOATING PRICE PAYOR: SELLER

PRODUCT: SINGAPORE HSFO 180 CST

QUANTITY: ... M/T EXACTLY

FIXED PRICE: USD ... PER MT (...)

FLOATING PRICE: THE PRICE SHALL BE THE ARITHMETIC AVERAGE OF THE HIGH AND LOW QUOTATIONS FOR SINGAPORE HSFO 180 CST PHYSICAL CARGOES APPEARING UNDER THE HEADING SINGAPORE IN PLATTS ASIA PACIFIC/ARAB GULF MARKETSCAN DURING THE PERIOD ...BOTH DATES INCLUSIVE).

PRICING PERIOD: XXXXXX

PAYMENT DUE DATE: 14 CALENDAR DAYS AFTER THE LAST DAY OF THE PRICING PERIOD

CREDIT: AS PREVIOUSLY AGREED BETWEEN THE PARTIES HERETO

OPERATIONAL CONTACT:

=====
Broker

TLX: XXXX

FAX: (65) XXX XXXX

TEL: (65) XXX XXXX

ATTN: XXXXX

PLEASE ENSURE THAT ALL TELEX CORRESPONDENCE BETWEEN SELLER AND BUYER IS COPIED TO BROKER XXXXX.

REGARDS