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## ***ARGUS TANKER FREIGHT***

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The most up-to-date Argus Tanker Freight methodology is available on [www.argusmedia.com](http://www.argusmedia.com)

## Methodology overview

### Methodology rationale

Argus strives to construct methodologies that reflect the way the market trades. Argus aims to produce price assessments which are reliable and representative indicators of commodity market values and are free from distortion. As a result, the specific currencies, volume units, locations and other particulars of an assessment are determined by industry conventions.

In the freight markets, Argus publishes physical market prices in the open market as laid out in the specifications and methodology guide. Argus uses the trading period deemed by Argus to be most appropriate, in consultation with industry, to capture market liquidity. In order to be included in the assessment process, deals must meet the minimum volume, delivery, timing and specification requirements in our methodology. In illiquid markets, and in other cases where deemed appropriate, Argus assesses the range within which product could have traded by applying a strict process outlined later in this methodology.

### Survey process

Argus price assessments are informed by information received from a wide cross section of market participants, including producers, consumers and intermediaries. Argus reporters engage with the industry by proactively polling participants for market data. Argus will contact and accept market data from all credible market sources including front and back office of market participants and brokers. Argus will also receive market data from electronic trading platforms and directly from the back offices of market participants. Argus will accept market data by telephone, instant messenger, email or other means.

Argus encourages all sources of market data to submit all market data to which they are a party that falls within the Argus stated methodological criteria for the relevant assessment. Argus encourages all sources of market data to submit transaction data from back office functions.

Throughout all markets, Argus is constantly seeking to increase the number of companies willing to provide market data. Reporters are mentored and held accountable for expanding their pool of contacts. The number of entities providing market data can vary significantly from day to day based on market conditions.

For certain price assessments identified by local management, if more than 50pc of the market data involved in arriving at a price assessment is sourced from a single party the supervising editor will engage in an analysis of the market data with the primary reporter to ensure that the quality and integrity of the assessment has not been affected.

### Market data usage

In each market, Argus uses the methodological approach deemed to be the most reliable and representative for that market. Argus will utilise various types of market data in its methodologies, to include:

- Transactions
- Bids and offers
- Other market information, to include spread values between grades, locations, timings, and many other data.

In many markets, the relevant methodology will assign a relatively higher importance to transactions over bids and offers, and a relatively higher importance to bids and offers over other market information. Certain markets however will exist for which such a hierarchy would produce unreliable and non-representative price assessments, and so the methodology must assign a different relative importance in order to ensure the quality and integrity of the price assessment. And even in markets for which the hierarchy normally applies, certain market situations will at times emerge for which the strict hierarchy would produce non-representative prices, requiring Argus to adapt in order to publish representative prices.

### Verification of transaction data

Reporters carefully analyse all data submitted to the price assessment process. These data include transactions, bids, offers, volumes, counterparties, specifications and any other information that contributes materially to the determination of price. This high level of care described applies regardless of the methodology employed. Specific to transactions, bids, and offers, reporters seek to verify the price, the volume, the specifications, location basis, and counterparty. In some transactional average methodologies, reporters also examine the full array of transactions to match counterparties and arrive at a list of unique transactions. In some transactional average methodologies, full details of the transactions verified are published electronically and are accessible by subscribers. The deals are also published in the daily report.

Several tests are applied by reporters in all markets to transactional data to determine if it should be subjected to further scrutiny. If a transaction has been identified as failing such a test, it will receive further scrutiny. For assessments used to settle derivatives and for many other assessments, Argus has established internal procedures that involve escalation of inquiry within the source's company and escalating review within Argus management. Should this process determine that a transaction should be excluded from the price assessment process, the supervising editor will initiate approval and, if necessary, documentation procedures.

### Primary tests applied by reporters

- Transactions not transacted at arm's length, including deals between related parties or affiliates.
- Transaction prices that deviate significantly from the mean of all transactions submitted for that day.
- Transaction prices that fall outside of the generally observed lows and highs that operated throughout the trading day.
- Transactions that are suspected to be a leg of another transaction or in some way contingent on an unknown transaction.
- Single deal volumes that significantly exceed the typical transaction volume for that market.
- Transaction details that are identified by other market participants as being for any reason potentially anomalous and perceived by Argus to be as such.

- Transaction details that are reported by one counterparty differently than the other counterparty.
- Any transaction details that appear to the reporter to be illogical or to stray from the norms of trading behaviour. This could include but is not limited to divergent specifications, unusual delivery location and counterparties not typically seen.
- Transactions that involve the same counterparties, the same price and delivery dates are checked to see that they are separate deals and not one deal duplicated in Argus records.

### Secondary tests applied by editors for transactions identified for further scrutiny

#### Transaction tests

- The impact of linkage of the deal to possible other transactions such as contingent legs, exchanges, options, swaps, or other derivative instruments. This will include a review of transactions in markets that the reporter may not be covering.
- The nature of disagreement between counterparties on transactional details.
- The possibility that a deal is directly linked to an offsetting transaction that is not publicly known, for example a “wash trade” which has the purpose of influencing the published price.
- The impact of non-market factors on price or volume, including distressed delivery, credit issues, scheduling issues, demurrage, or containment.

#### Source tests

- The credibility of the explanation provided for the outlying nature of the transaction.
- The track record of the source. Sources will be deemed more credible if they
  - Regularly provide transaction data with few errors.
  - Provide data by Argus’ established deadline.
  - Quickly respond to queries from Argus reporters.
  - Have staff designated to respond to such queries.
- How close the information receipt is to the deadline for information, and the impact of that proximity on the validation process.

### Assessment guidelines

When insufficient, inadequate, or no transaction information exists, or when Argus concludes that a transaction based methodology will not produce representative prices, Argus reporters will make an assessment of market value by applying intelligent judgment based on a broad array of factual market information. Reporters must use a high degree of care in gathering and validating all market data used in determining price assessments, a degree of care equal to that applying to gathering and validating transactions. The information used to form an assessment could include deals done, bids, offers, tenders, spread trades, exchange trades, fundamental supply and demand information and other inputs.

The assessment process employing judgment is rigorous, replicable, and uses widely accepted valuation metrics. These valuation metrics mirror the process used by physical commodity traders

to internally assess value prior to entering the market with a bid or offer. Applying these valuation metrics along with sound judgment significantly narrows the band within which a commodity can be assessed, and greatly increases the accuracy and consistency of the price series. The application of judgment is conducted jointly with the supervising editor, in order to be sure that guidelines below are being followed. Valuation metrics include the following:

#### Relative value transactions

Frequently transactions occur which instead of being an outright purchase or sale of a single commodity, are instead exchanges of commodities. Such transactions allow reporters to value less liquid markets against more liquid ones and establish a strong basis for the exercise of judgment.

- Exchange one commodity for a different commodity in the same market at a negotiated value.
- Exchange delivery dates for the same commodity at a negotiated value.
- Exchange a commodity in one location for the same commodity at another location at a negotiated value.

#### Bids and offers

If a sufficient number of bids and offers populate the market, then in most cases the highest bid and the lowest offer can be assumed to define the boundaries between which a deal could be transacted.

#### Comparative metrics

The relative values between compared commodities are readily discussed in the market and can be discovered through dialogue with market participants. These discussions are the precursor to negotiation and conclusion of transactions.

- Comparison to the same commodity in another market centre.
- Comparison to a more actively traded but slightly different specification commodity in the same market centre.
- Comparison to the same commodity traded for a different delivery timing.
- Comparison to the commodity’s primary feedstock or primary derived product(s).
- Comparison to trade in the same commodity but in a different modality (as in barge versus oceangoing vessel) or in a different total volume (as in full cargo load versus partial cargo load).

#### Volume minimums and transaction data thresholds

Argus typically does not establish thresholds strictly on the basis of a count of transactions, as this could lead to unreliable and non-representative assessments and because of the varying transportation infrastructure found in all commodity markets. Instead, minimum volumes are typically established which may apply to each transaction accepted, to the aggregate of transactions, to transactions which set a low or high assessment or to other volumetrically relevant parameters.

For price assessments used to settle derivatives, Argus will seek to establish minimum transaction data thresholds and when no such

threshold can be established Argus will explain the reasons. These thresholds will often reflect the minimum volumes necessary to produce a transaction-based methodology, but may also establish minimum deal parameters for use by a methodology that is based primarily on judgment.

Should no transaction threshold exist, or should submitted data fall below this methodology's stated transaction data threshold for any reason, Argus will follow the procedures outlined elsewhere in this document regarding the exercise of judgment in the price assessment process.

### Transparency

Argus values transparency in energy markets. As a result, where available, we publish lists of deals in our reports that include price, basis, counterparty and volume information. The deal tables allow subscribers to cross check and verify the deals against the prices. Argus feels transparency and openness is vital to developing confidence in the price assessment process.

### Swaps and forwards markets

Argus publishes forward assessments for numerous markets. These include forward market contracts that can allow physical delivery and swaps contracts that swap a fixed price for the average of a floating published price. Argus looks at forward swaps to inform physical assessments but places primary emphasis on the physical markets.

### Publications and price data

Freight rates are published in the Argus Tanker Freight report. Subsets of these prices appear in other Argus market reports and newsletters in various forms. The price data are available independent of the text-based report in electronic files that can feed into various databases. These price data are also supplied through various third-party data integrators. The Argus website also provides access to prices, reports and news with various web-based tools. All Argus prices are kept in a historical database and available for purchase. Contact your local Argus office for information.

A publication schedule is available at [www.argusmedia.com](http://www.argusmedia.com)

### Corrections to assessments

Argus will on occasion publish corrections to price assessments after the publication date. We will correct errors that arise from clerical mistakes, calculation errors, or a misapplication of our stated methodology. Argus will not retroactively assess markets based on new information learned after the assessments are published. We make our best effort to assess markets based on the information we gather during the trading day assessed.

### Ethics and compliance

Argus operates according to the best practices in the publishing field, and maintains thorough compliance procedures throughout the firm. We want to be seen as a preferred provider by our subscribers, who are held to equally high standards, while at the same time maintaining our editorial integrity and independence. Argus has a strict ethics policy that applies to all staff. The policy can be

found on our website at [www.argusmedia.com](http://www.argusmedia.com). Included in this policy are restrictions against staff trading in any energy commodity or energy related stocks, and guidelines for accepting gifts. Argus also has strict policies regarding central archiving of email and instant messenger communication, maintenance and archiving of notes, and archiving of spreadsheets and deal lists used in the price assessment process. Argus publishes prices that report and reflect prevailing levels for open-market arms length transactions (please see the [Argus Global Compliance Policy](#) for a detailed definition of arms length).

### Consistency in the assessment process

Argus recognises the need to have judgment consistently applied by reporters covering separate markets, and by reporters replacing existing reporters in the assessment process. In order to ensure this consistency, Argus has developed a programme of training and oversight of reporters. This programme includes:

- A global price reporting manual describing among other things the guidelines for the exercise of judgment
- Cross-training of staff between markets to ensure proper holiday and sick leave backup. Editors that float between markets to monitor staff application of best practices
- Experienced editors overseeing reporting teams are involved in daily mentoring and assisting in the application of judgment for illiquid markets
- Editors are required to sign-off on all price assessments each day, thus ensuring the consistent application of judgment.

### Review of methodology

The overriding objective of any methodology is to produce price assessments which are reliable and representative indicators of commodity market values and are free from distortion. As a result, Argus editors and reporters are regularly examining our methodologies and are in regular dialogue with the industry in order to ensure that the methodologies are representative of the market being assessed. This process is integral with reporting on a given market. In addition to this ongoing review of methodology, Argus conducts reviews of all of its methodologies and methodology documents on at least an annual basis.

Argus market report editors and management will periodically and as merited initiate reviews of market coverage based on a qualitative analysis that includes measurements of liquidity, visibility of market data, consistency of market data, quality of market data and industry usage of the assessments. Report editors will review:

- Appropriateness of the methodology of existing assessments
- Termination of existing assessments
- Initiation of new assessments.

The report editor will initiate an informal process to examine viability. This process includes:

- Informal discussions with market participants
- Informal discussions with other stakeholders
- Internal review of market data

Should changes, terminations, or initiations be merited, the report editor will submit an internal proposal to management for review and approval. Should changes or terminations of existing assessments be approved, then formal procedures for external consultation are begun.

### Changes to methodology

Formal proposals to change methodologies typically emerge out of the ongoing process of internal and external review of the methodologies. Formal procedures for external consultation regarding material changes to existing methodologies will be initiated with an announcement of the proposed change published in the relevant Argus report. This announcement will include:

- Details on the proposed change and the rationale
- Method for submitting comments with a deadline for submissions
- For prices used in derivatives, notice that all formal comments will be published after the given consultation period unless submitter requests confidentiality.

Argus will provide sufficient opportunity for stakeholders to analyse and comment on changes, but will not allow the time needed to follow these procedures to create a situation wherein unrepresentative or false prices are published, markets are disrupted, or market participants are put at unnecessary risk. Argus will engage with industry throughout this process in order to gain acceptance of proposed changes to methodology. Argus cannot however guarantee universal acceptance and will act for the good order of the market and ensure the continued integrity of its price assessments as an overriding objective.

Following the consultation period, Argus management will commence an internal review and decide on the methodology change. This will be followed by an announcement of the decision, which will be published in the relevant Argus report and include a date for implementation. For prices used in derivatives, publication of stakeholders' formal comments that are not subject to confidentiality and Argus' response to those comments will also take place.

## Introduction

Argus Tanker Freight is a daily market report that publishes prices and market commentary on the international shipping spot market for crude and petroleum products.

Assessments are of typical and repeatable freight rates discussed in the market. The assessed prices are based on prices from the open spot market whenever possible. Argus Tanker Freight assessments are of the prices at which vessels have been fixed and could be fixed. A fixture does not need to be concluded with subjects lifted in order for a rate to be taken into account when making an assessment. Offers of and bids for tonnage and discussed market levels will also be considered for inclusion in the assessment if deemed to be representative of an achievable market rate.

Argus assessments are of the prevailing market rate within the parameters defined in this document.

Rates are based on fixtures and market discussion for forward periods specified below. Argus takes into account liquidity outside this period and market structure.

Argus does not independently calculate or include an allowance for low-sulphur fuel costs within the Baltic and North Sea, North America and Caribbean Emissions Control Areas (ECAs). If the market in a given sector evolves to incorporate an allowance for increased fuel costs within the ECA as a convention, Argus will exercise its discretion in assessing the prevailing spot price.

Argus market specialists conduct comprehensive daily surveys of key industry participants to collect trade information and gauge prevailing market sentiment. Argus price assessments for Argus Tanker Freight include market information gathered on fixtures and daily bid/ask spreads for each route under standardised specifications and under the general terms and conditions employed for the standard contracts in common use.

The market surveys are balanced in their approach and are conducted by well-trained specialists who are part of a dedicated team responsible for the Argus Tanker Freight report.

The Argus methodology relies on a common sense approach and informed analysis of all market data. The market surveys involve more than 30 market participants contacted by telephone or electronically. Market participants each day include ship owners, oil company charterers and ship brokers. The information is verified and analysed. The approach is methodical and standardised and the assessments are tested against the views of other market participants. Argus Tanker Freight does not use the Baltic Exchange for its freight assessments.

Factors including but not limited to vessel age (often from 15 years and older for certain vessel classes and in certain markets), the last cargo carried, an absence of Sire certificate, recent dry docking, non-standard cargoes and positioning considerations may affect the agreed rate. Argus will, where possible, remove discounts or premiums from rates considered for inclusion in an assessment, following discussion with the market.

Information from the survey is verified as best possible and archived in databases.

Assessments are of prevailing market levels at the end of the trading day or week as specified in the tables below.

Regional freight data will become available at the close of business in Asia, Europe-Africa, and the Americas.

## Oil and refined products

Argus Tanker Freight contains assessments of the prevailing Worldscale spot rates for generic routes for dirty and clean tankers and also US dollars per tonne costs for all routes reported. Market commentary is provided for the main routes. The key benchmark Mideast Gulf\* to east route is based on double hull ships.

The assessment, whenever possible, will be based on tonnage that has passed two major oil companies' vetting procedure in the previous 12 months. If fixing activity for well approved tonnage constitutes a minority of the total market activity in a sector, Argus will consider any other relevant market information in making the Argus assessment. Fixtures and bid/ask ranges outside of the Argus specifications are considered when assessing prices if market participants believe they have affected market values for the routes under the standardised terms reported in the Argus Tanker Freight report.

All day information is taken into account but if the market shows high intra-day volatility, Argus will weight the assessments towards trading activity at the end of the working day up to the cut-off times in the specifications listed below.

*\* This stretch of water is traditionally referred to as the Persian Gulf but some reference prices used by the industry refer to it as the Arab Gulf. Argus Tanker Freight uses Mideast Gulf to avoid any contractual confusion.*

### Units of measurement

Argus Tanker Freight assessments for dirty and clean tankers are made in Worldscale spot rates and are inter-regional (regions defined below) and are not port specific. The conversion from Worldscale spot rates assessed by Argus to a \$/t figure in the Argus Tanker Freight report is made using an average of the three most typically-used Worldscale flat rates in a region. The Mideast Gulf-Singapore 55,000t gasoil and Guyana-Panama 130,000t rates are exceptions, based on an average of the two most typically-used Worldscale flat rates in each region. This does not mean that only fixtures for those routes are taken into account; these routes are used only to derive a typical Worldscale flat rate which is then applied to the inter-regional Worldscale spot assessment.

All assessments and formulas refer to the price of the product on the day of the published report and expressed in Worldscale spot rates and/or US dollars a tonne unless otherwise stated. The prices are for contracts under whatever general terms and conditions are accepted as standard and prevailing in that particular market. Price changes refer to the last published report.

All rates are published in \$/t. Indicated rates are assessed and published as lump sums and converted to \$/t, except for the US Gulf Coast Aframax reverse lightering assessment. References to t or tonnes are metric tonnes.

### Clean and dirty vessels

Unless otherwise specified in the description of assessed rates below, "dirty" refers to shipping that is chartered for the shipment of crude, or of dirty petroleum products (DPP), which are fuel oil and

vacuum gasoil. "Clean" refers to shipping that is chartered for the shipment of "clean petroleum products" (CPP), which are gasoline, naphtha and middle distillates. LPG rates are assessed separately.

### Vessel type

To be considered for inclusion in oil and refined products freight rate assessments, vessels must be double hull and double bottomed with segregated ballast tanks.

Clean rates in the Mediterranean and Black Sea assume a base rate for gasoil.

See the complete list of assessed [clean](#) and [dirty](#) oil and refined freight rates and their specifications below.

## Oil and products calculated rates

Argus publishes a series of calculated time-charter equivalent and voyage rates for clean and dirty vessels on specified routes. Time-charter equivalent rates are based on assessed \$/t freight rates, bunker fuel costs and Argus assessments of other costs involved with the voyage. Calculated voyage rates are based on assessed one-year time-charter rates, bunker fuel costs and Argus assessments of other costs involved with the voyage.

All time-charter equivalent rates are calculated using the same generalised formula:  $TCE (\$/day) = (Voyage\ rate (\$/t) \times Cargo\ size (t) - Costs (\$)) / Voyage\ duration$

All voyage rates are calculated using the same generalised formula:  $Voyage\ rate (\$/t) = (Time-charter\ rate (\$/d) * Voyage\ duration - Costs (\$)) / Cargo\ size (t)$

Lumpsum rates are calculated for several routes originating in Russia. The calculation uses the generalised formula:  $Lumpsum\ rate (\$) = (Time-charter\ equivalent\ rate (TCE, \$/d) * Voyage\ duration + Costs (\$))$ .

The TCE rates used in the calculation are derived from the Argus assessment of rates for 80,000t or 135,000t cargoes of non-Russian crude on the Black Sea to Mediterranean route. Calculated lumpsum values for routes ending in China are adjusted for the longer voyage using Argus assessments of rates for routes delivering in India and east Asia.

To differentiate these calculated rates from assessments of market rates on similar routes, they are named "baseline" rates in print and across digital distribution channels.

### Bunker fuel

Published time-charter equivalent rates are based on vessels burning 0.5pc sulphur fuel oil. VLCC and Suezmax rates are also published for scrubber-equipped vessels burning 3.5pc sulphur fuel oil.

Fuel prices are the latest Argus assessments at the named fuelling location (Singapore, Fujairah, South Korea, far east Russia, Rotterdam, Gibraltar and Houston) available at the time of publication. See the [Argus Marine Fuels methodology](#).



## Time charter assessments

The time-charter rates used in the voyage rate calculations are the \$/day cost of hiring a standard tanker for a duration of 12 months. The time-charter rates exclude bunker costs, port fees, canal tolls, and other voyage-related fees. Argus assesses time-charter rates on Monday of every week and on the following day if Monday is a holiday.

### Time-charter rates are assessed for

- Dirty Aframax tanker
- Dirty Panamax tanker

## Assumptions

In addition to those specified below, Argus also assumes standard sea margins, and standard address and broker commissions. All routes assume two days for each loading and discharge and 36 hours of waiting time added to the duration of the voyage.

Unless otherwise specified, all voyages are assumed to take the shortest-distance route, via canals if possible. Canals costs are included where necessary. Panama Canal transits are assumed to have been pre-booked and to add two days to the voyage time, one in transit and one waiting. Suez Canal transits are assumed to add one day to the voyage time, 12 hours in transit and 12 hours waiting.

All assumptions are under continual review and are updated at least once a year.

### Vessel assumptions and port costs – VLCC

Term	Value	Port	Cost
Deadweight tonnage (dwt)	319,000	Basrah	318,000
Length (m)	333	Bonny	60,000
Beam (m)	60	Corpus Christi	250,000
Speed (knots)	12.5	LOOP	40,000
Ballast fuel consumption (t/d)	47	Los Angeles	94,000
Laden fuel consumption (t/d)	65	Ningbo	194,000
Loading operation fuel consumption (t/d)	20	Ras Tanura	80,000
Discharging operation fuel consumption (t/d)	110	Rotterdam	312,000
Idle consumption (t/d)	10		

### Vessel assumptions and port costs – Suezmax

Term	Value	Port	Cost
Deadweight tonnage (dwt)	158,000	Basrah	295,000
Length (m)	275	Bonny	40,000
Beam (m)	48	Houston	127,000
Speed (knots)	12.5	Mumbai	170,000
Ballast fuel consumption (t/d)	39	Murmansk	52,000
Laden fuel consumption (t/d)	49	Ningbo	115,000
Loading operation fuel consumption (t/d)	12	Novorossiysk	53,000
Discharging operation fuel consumption (t/d)	68	Qingdao	65,000
Idle consumption (t/d)	10	Ras Tanura	25,000
		Rotterdam	168,000
		Singapore	57,500
		Trieste	87,000

### Vessel assumptions and port costs – Aframax and LR2

Term	Value	Port	Cost
Deadweight tonnage (dwt)	115,000		
Length (m)	250	Arzew	175,000
Beam (m)	44	Batangas	46,000
Speed (knots)	12.5	Bukit Tua	43,750
Ballast fuel consumption (t/d)	34	Dalian	61,500
Laden fuel consumption (t/d)	40	De-Kastri	27,000
Loading operation fuel consumption (t/d)	10	Dongjiakou	53,000
Discharging operation fuel consumption (t/d)	49	Dongying	45,660
Idle consumption (t/d)	5	Dos Bocas	63,000
Maintain heat (t/d)	10	Fujairah	46,000
Heat up (t/d)	17.5	Geelong	128,000
		Houston	86,000
		Huangdao	70,000
		Huanghua	70,000
		Huizhou	75,000
		Jinzhou	58,000
		Kiire	82,000
		Kikuma	82,000
		Kimanis	115,500
		Kochi	89,000
		Kozmino	90,000
		Lianyungang	72,500
		Longkou	82,000
		Mumbai	75,000
		Ningbo	64,500
		Novorossiysk	115,000
		Panjin	56,000
		Paradip	84,000
		Primorsk	80,000
		Qingdao	41,000
		Qinzhou	55,400
		Rizhao	127,000
		Rotterdam	127,000
		Shanghai	53,000
		Sikka	75,000
		Singapore	32,500
		Sriracha	18,000
		Tianjin	50,000
		Trieste	65,000
		Visakhapatnam	130,760
		Yantai	69,000
		Yeosu	35,000
		Yeosu STS discount	20,000
		Zhanjiang	69,000
		Zhoushan	75,000
		<b>LR2 port costs</b>	
		Arzew	194,000
		Chiba	69,000
		Oita	46,000
		Ras Tanura	40,000
		Rotterdam	115,200
		Santos	110,000
		Sikka	92,200
		Yanbu	9,800

**Vessel assumptions and port costs – Panamax and LR1**

Term	Value	Port	Cost
Deadweight tonnage (dwt)	74,000	<b>Panamax port costs</b>	
Length (m)	228	Esmeraldas	33,000
Beam (m)	32	Houston	60,000
Speed (knots)	12.5	<b>LR1 port costs</b>	
Ballast fuel consumption (t/d)	28	Arzew	124,000
Laden fuel consumption (t/d)	32	Chiba	57,500
Loading operation fuel consumption (t/d)	5	Oita	40,700
Discharging operation fuel consumption (t/d)	32	Ras Tanura	30,000
Idle consumption (t/d)	5	Rotterdam	86,400
		Sikka	58,700
		Singapore	25,000
		Yanbu	8,800

**Vessel assumptions and port costs – handysize**

Term	Value	Port	Cost
Deadweight tonnage (dwt)	37,500	Arzew	71,400
Length (m)	175	Brofjordan	42,000
Beam (m)	27.5	Rotterdam	56,000
Speed (knots)	12.5	Trieste	36,300
Ballast fuel consumption (t/day)	20		
Laden fuel consumption (t/d)	24		
Loading operation fuel consumption (t/d)	5		
Discharging operation fuel consumption (t/d)	20		
Idle consumption (t/d)	5		

**Oil and products TCE assessments**

Load port	Discharge port	Cargo size (t)	Bunker Price	Vessel starting position
<b>Dirty tanker TCE assessments</b>				
Ras Tanura*	LOOP*	280,000	Singapore	Ningbo
Ras Tanura**	Rotterdam**	280,000	Singapore	Ningbo
Basrah	Los Angeles	280,000	Fujairah	Los Angeles
Corpus Christi	Ningbo	270,000	Singapore	Ningbo
Ras Tanura	Ningbo	270,000	Singapore	Ningbo
Bonny	Ningbo	260,000	Singapore	Ningbo
Houston	Rotterdam	145,000	Rotterdam	Rotterdam
Basrah	Trieste	140,000	Singapore	Ningbo
Novorossiysk-CPC	Ningbo	135,000	Singapore	Ningbo
Bonny	Rotterdam	130,000	Rotterdam	Rotterdam
Ras Tanura	Qingdao	130,000	Singapore	Qingdao
Ras Tanura	Singapore	130,000	Singapore	Singapore
Kozmino	Longkou	100,000	Russian far east	Longkou
Arzew	Trieste	80,000	Gibraltar	Trieste
Fujairah	Singapore	80,000	Singapore	Singapore
Bukit Tua	Kikuma	80,000	Singapore	Kikuma
Kimanis	Geelong	80,000	Singapore	Geelong
Dos Bocas	Houston	70,000	Houston	Houston
Houston	Rotterdam	70,000	Houston	Rotterdam

\*Laden leg via Cape of Good Hope/ballast leg via Suez

\*\*Laden leg and ballast leg via Cape of Good Hope

**Vessel assumptions and port costs – MR**

Term	Value	Port	Cost
Deadweight tonnage (dwt)	51,000	Augusta	
Length (m)	183	Chiba	37,500
Beam (m)	32.2	Coronel	84,000
Speed (knots)	12.5	Daesan	35,000
Ballast fuel consumption (t/d)	22	Dalian	30,000
Laden fuel consumption (t/d)	26	Dar es Salaam	30,000
Loading operation fuel consumption (t/d)	5	Houston	42,000
Discharging operation fuel consumption (t/d)	25	Los Angeles	40,600
Idle consumption (t/d)	5	New York	42,000
		Pengerang	8,000
		Port Botany	60,000
		Pozos	87,000
		Ras Tanura	20,000
		Rotterdam	56,000
		Santa Panagia	28,000
		Sarroch	55,000
		Singapore	20,000
		Tanjung Bin	7,000
		Yeosu	30,000

**Oil and products TCE assessments**

Load port	Discharge port	Cargo size (t)	Bunker Price	Vessel starting position
<b>Dirty tanker voyage rate assessments</b>				
De-Kastri*	Batangas	100,000	Russian far east	Longkou
De-Kastri*	Dalian	100,000	Russian far east	Longkou
De-Kastri*	Dongjiakou	100,000	Russian far east	Longkou
De-Kastri*	Dongying	100,000	Russian far east	Longkou
De-Kastri*	Huangdao	100,000	Russian far east	Longkou
De-Kastri*	Hunaghua	100,000	Russian far east	Longkou
De-Kastri*	Huizhou	100,000	Russian far east	Longkou
De-Kastri*	Jinzhou	100,000	Russian far east	Longkou
De-Kastri*	Kiire	100,000	Russian far east	Longkou
De-Kastri*	Kochi	100,000	Russian far east	Longkou
De-Kastri*	Longkou	100,000	Russian far east	Longkou
De-Kastri*	Lianyungang	100,000	Russian far east	Longkou
De-Kastri*	Mumbai	100,000	Russian far east	Longkou
De-Kastri*	Ningbo	100,000	Russian far east	Longkou
De-Kastri*	Panjin	100,000	Russian far east	Longkou
De-Kastri*	Paradip	100,000	Russian far east	Longkou
De-Kastri*	Qingdao	100,000	Russian far east	Longkou
De-Kastri*	Qinzhou	100,000	Russian far east	Longkou
De-Kastri*	Rishao	100,000	Russian far east	Longkou
De-Kastri*	Shanghai	100,000	Russian far east	Longkou
De-Kastri*	Sikka	100,000	Russian far east	Longkou



**Oil and products TCE assessments**

Load port	Discharge port	Cargo size (t)	Bunker Price	Vessel starting position
De-Kastri*	Singapore	100,000	Russian far east	Longkou
De-Kastri*	Sriracha	100,000	Russian far east	Longkou
De-Kastri*	Tianjin	100,000	Russian far east	Longkou
De-Kastri*	Yantai	100,000	Russian far east	Longkou
De-Kastri*	Yeosu	100,000	Russian far east	Longkou
De-Kastri*	Yeosu STS	100,000	Russian far east	Longkou
De-Kastri*	Zhanjiang	100,000	Russian far east	Longkou
De-Kastri*	Zhoushan	100,000	Russian far east	Longkou
Esmeraldas	Los Angeles	100,000	Los Angeles	Los Angeles
Esmeraldas	Houston	50,000	Houston	Houston
Kozmino	Paradip	100,000	Russian far east	Longkou
Kozmino	Sikka	100,000	Russian far east	Longkou
Yeosu STS*	Dongying	100,000	Russian far east	Longkou
Yeosu STS*	Huangdao	100,000	Russian far east	Longkou
Yeosu STS*	Huanghua	100,000	Russian far east	Longkou
Yeosu STS*	Huizhou	100,000	Russian far east	Longkou
Yeosu STS*	Kochi	100,000	Russian far east	Longkou
Yeosu STS*	Mumbai	100,000	Russian far east	Longkou
Yeosu STS*	Qingdao	100,000	Russian far east	Longkou
Yeosu STS*	Sikka	100,000	Russian far east	Longkou
Yeosu STS*	Tianjin	100,000	Russian far east	Longkou
Yeosu STS*	Visakhapatnam	100,000	Russian far east	Longkou

\*Also published in lumpsum

**Russian dirty tanker baseline rates**

Primorsk	north China	100,000	Singapore	north China
Primorsk	WC India	100,000	Rotterdam	WC India
Murmansk	north China	140,000	Singapore	north China
Murmansk	WC India	140,000	Rotterdam	WC India
Novorossiysk	north China	140,000	Singapore	north China
Novorossiysk	WC India	140,000	Gibraltar	WC India
Novorossiysk	north China	80,000	Singapore	north China
Novorossiysk	WC India	80,000	Gibraltar	WC India

**Oil and products TCE assessments**

Load port	Discharge port	Cargo size (t)	Bunker Price	Vessel starting position	
<b>Clean tanker TCE assessments</b>					
Ras Tanura	Rotterdam	90,000	Rotterdam	Rotterdam	
Sikka	Rotterdam	90,000	Rotterdam	Rotterdam	
Yanbu	Rotterdam	90,000	Rotterdam	Rotterdam	
Arzew	Oita	80,000	Singapore	Rotterdam	
Ras Tanura	Chiba	75,000	Singapore	Chiba	
Ras Tanura	Rotterdam	65,000	Rotterdam	Rotterdam	
Sikka	Rotterdam	65,000	Fujairah	Rotterdam	
Yanbu	Rotterdam	65,000	Rotterdam	Rotterdam	
Arzew	Oita	60,000	Singapore	Rotterdam	
Ras Tanura	Chiba	55,000	Singapore	Chiba	
Ras Tanura	Singapore	55,000	Singapore	Singapore	
Houston	Pozos	38,000	Houston	Pozos	
Houston	Coronel	38,000	Houston	Coronel	
Rotterdam	New York	37,000	Rotterdam	Rotterdam	
Daesan	Port Botany	35,000	South Korea	Port Botany	
Ras Tanura	Chiba	35,000	Singapore	Singapore	
Ras Tanura	Singapore	35,000	Singapore	Singapore	
Ras Tanura	Dar es Salaam	35,000	Fujairah	Dar es Salaam	
Singapore	Port Botany	35,000	Singapore	Port Botany	
Yeosu	Los Angeles	35,000	South Korea	Los Angeles	
Yeosu	Singapore	35,000	South Korea	Hong Kong	
Southeast Asia*	(Singapore, Tanjung Bin, Pengerang)	Walvis Bay	35,000	Singapore	Singapore
Mediterranean*	(Augusta, Sarroch, Santa Panagia)	Walvis Bay	35,000	Gibraltar	Mediterranean
Arzew	Trieste	30,000	Gibraltar	Trieste	
Brojorden	Rotterdam	30,000	Rotterdam	Rotterdam	
Dalian	Singapore	30,000	Singapore	Hong Kong	

\*Also published in Worldscale

## Additional war risk premium

Argus Tanker Freight includes assessments of the cost of additional war risk insurance premiums (AWRP) for crude- and product-carrying vessels calling at Russian ports.

### Dirty tankers

- Baltic Sea Aframax
- Black Sea Aframax
- Barents Sea Suezmax
- Black Sea Suezmax

AWRP are also calculated as \$/bl costs for the named crude using the latest available bl/t density figure for each grade.

- Urals Novorossiysk Aframax
- Urals Ust-Luga Aframax
- Urals Novorossiysk Suezmax
- Varandey Blend Murmansk Suezmax
- Novy Port Light Murmansk Suezmax
- Arco Murmansk Suezmax

### Clean tankers

- Baltic Sea MR
- Black Sea MR
- Baltic Sea Handysize
- Black Sea Handysize

See the [Argus Nefetransport methodology](#).

## Delays, demurrage and canal auctions

### Turkish straights delays

Delays, in number of days, are assessed for northbound and southbound transits of the Turkish straights (the Bosphorus and Dardanelles). The number of days delay includes the days on the owner's account. Assessments are as of 5pm London time on the day of assessment.

### Demurrage

The price of demurrage in \$/d for a vessel of the named type on the named route.

#### Demurrage

Assessment	Vessel	Timing	Time
Atlantic basin-Asia	VLCC	20-50 days	NY, 5pm
Mideast Gulf-East	VLCC	15-30 days	UK, 5pm
Mideast Gulf-East	Suezmax	15-30 days	UK, 5pm
Black Sea-Med	Suezmax	15-20 days	UK, 5pm
Black Sea-Med	Aframax	15-20 days	UK, 5pm
De-Kastri-India	Aframax	15-30 days	SGP, 4.30pm
De-Kastri-north China	Aframax	15-30 days	SGP, 4.30pm
De-Kastri-South Korea	Aframax	15-30 days	SGP, 4.30pm
Kozmino-north China	Aframax	15-30 days	SGP, 4.30pm
USGC-Europe	Aframax	5-22 days	NY, 5pm
Atlantic coast Americas	MR	3-10 days	NY, 5pm

### Panama Canal wait times

Assessed daily as the number of days a vessel without a booked slot must wait before it can transit the specified set of locks in the named direction. Wait times are assessed as of 5pm New York time.

Northbound and southbound wait times are assessed for

- Neopanamax locks for vessels with a beam exceeding 107ft
- Panamax locks for vessels with a 91-107ft beam

### Panama Canal auction prices

Argus publishes a weekly average of daily auction prices paid by shippers to reserve a transit slot when pre-booked slots are unavailable. Auction prices are published on Monday for

- Panamax locks
- Neopanamax locks

## Jones Act freight rates

Argus publishes assessments of Jones Act-compliant freight rates between US ports for medium range tankers (MR) and oceangoing articulated tug barges (ATB). Jones Act-compliant vessels are US-flagged, built and crewed.

In the absence of spot activity, changes in time charter rates may be taken into account.

Jones Act rates are for loading in 3-15 days. Rates are assessed weekly on Friday at a 2.30pm New York timestamp.

#### Jones Act rate specifications

Assessment	Vessel	Cargo size (bl)	Unit
<b>Dirty</b>			
Corpus Christi-Delaware Bay	MR	260,000-330,000	\$/bl
Corpus Christi-St. James	MR	260,000-330,000	\$/bl
Corpus Christi-St. James	ATB	140,000-260,000	\$/bl
<b>Clean</b>			
Houston-Tampa	MR	310,000-330,000	\$/bl
Houston-Tampa	ATB	140,000-260,000	\$/bl
Houston-Port Everglades	MR	310,000-330,000	\$/bl
Houston-Port Everglades	ATB	140,000-260,000	\$/bl
Houston-Jacksonville	MR	310,000-330,000	\$/bl
Houston-New York Harbor	MR	310,000-330,000	\$/bl
Houston-New York Harbor	ATB	140,000-260,000	\$/bl
New Orleans-Los Angeles	MR	310,000-330,000	\$/bl
US-US	MR	310,000-330,000	\$/d

The US-US \$/d rate is for voyages between any US ports.

The New Orleans-Los Angeles \$/bl calculation assumes Panama Canal transit and accounts for canal costs, including transit tolls and costs associated with delays and slot reservations. If canal disruption at the time of publication makes the Cape Horn route the lower-cost voyage, Argus will calculate \$/bl rates assuming a voyage around Cape Horn.

## Additional Rotterdam charges

Argus Tanker Freight publishes "Rotterdam charges", an assessment of additional charges for vessels of the sizes below calling at Rotterdam that are not included in spot tanker rates but are used in the calculation of several crude and products netback prices. These charges are excluded from the port fees assumed in time charter and other freight rate calculations.

Charges are published for

- 100,000t dirty
- 100,000t clean
- 40,000t clean

- 30,000t dirty
- 30,000t clean
- 20,000t clean
- 10,000t clean

## Specialised tankers

Argus Tanker Freight includes \$/t freight rates for shipments of liquid chemical cargoes, biofuels, biofuel feedstocks, and other specialised cargoes aboard coated or stainless steel eco-designed tankers. Rates are assessed weekly on Friday. See the complete list of specialised tanker rates and their specifications below.

### Specialised tanker freight rate specifications

Assessment	Size ('000t)	Origin	Destination	Cargo type	Timing	Time
UKC-USGC	10	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	US Gulf coast from Texas to Alabama, including US offshore ports	biodiesel	10-30 days	NY, 2:30pm
USGC-Itaqui	10-20	US Gulf coast from Texas to Alabama, including US offshore ports	Itaqui, Brazil	ethanol	7-21 days	NY, 2:30pm
south Brazil-UKC	10	Brazilian ports to the south of and excluding Suape	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	ethanol	10-30 days	NY, 2:30pm
south Brazil-Ulsan	10	Brazilian ports to the south of and excluding Suape	Ulsan, South Korea	ethanol	10-30 days	NY, 2:30pm
USGC-east coast Mexico	5-10	US Gulf coast from Texas to Alabama, including US offshore ports	Mexican east coast	ethanol	10-30 days	NY, 2:30pm
USGC-UKC	5	US Gulf coast from Texas to Alabama, including US offshore ports	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	ethanol	10-30 days	NY, 2:30pm
USGC-UKC	10	US Gulf coast from Texas to Alabama, including US offshore ports	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	methanol	10-30 days	NY, 2:30pm
USGC-Ulsan	10	US Gulf coast from Texas to Alabama, including US offshore ports	Ulsan, South Korea	methanol	10-30 days	NY, 2:30pm
Argentina+south Brazil (two port load)-China (two port discharge)	40	Argentinian ports and Brazilian ports to the south of and excluding Suape	China	vegetable oils	10-30 days	NY, 2:30pm
Argentina+south Brazil (two port load)-west coast India (two port discharge)	40	Argentinian ports and Brazilian ports to the south of and excluding Suape	Indian west coast	vegetable oils	10-30 days	NY, 2:30pm
Argentina-west coast India (two port discharge)	30	Argentina	Indian west coast	vegetable oils	10-30 days	NY, 2:30pm

## Crude-specific freight rates

Argus publishes freight rates for individual crude oil grades on relevant routes, in \$/bl. These are calculated as the \$/bl cost of shipment of the named crude on the named route using the latest available bl/t density figure for each grade.

### Arab Heavy

Mideast Gulf to Asia Pacific 270,000t

Mideast Gulf to China 130,000t

Mideast Gulf to Europe 280,000t

Mideast Gulf to Med 140,000t

Mideast Gulf to southeast Asia 130,000t

Mideast Gulf to Singapore 270,000t

Mideast Gulf to southeast Asia 80,000t

Mideast Gulf to USGC 280,000t

Mideast Gulf to west coast India 130,000t

Mideast Gulf to west coast India 270,000t

Mideast Gulf to west coast India 80,000t

### Arab Light

Mideast Gulf to Asia Pacific 270,000t

Mideast Gulf to northeast Asia 130,000t

Mideast Gulf to Europe 280,000t

Mideast Gulf to Med 140,000t

Mideast Gulf to southeast Asia 130,000t

Mideast Gulf to Singapore 270,000t

Mideast Gulf to USGC 280,000t

Mideast Gulf to west coast India 130,000t

Mideast Gulf to west coast India 270,000t

Mideast Gulf to west coast India 80,000t

**Arab Light (Sidi K)**

Med to Med 80,000t

Med to UKC 80,000t

**Arab Medium**

Mideast Gulf to Asia Pacific 270,000t

Mideast Gulf to northeast Asia 130,000t

Mideast Gulf to Europe 280,000t

Mideast Gulf to Med 140,000t

Mideast Gulf to southeast Asia 130,000t

Mideast Gulf to Singapore 270,000t

Mideast Gulf to USGC 280,000t

Mideast Gulf to west coast India 130,000t

Mideast Gulf to west coast India 270,000t

Mideast Gulf to west coast India 80,000t

**Azeri Light (Supsa)**

Black Sea to Med 80,000t

Black Sea to UKC 80,000t

**Basrah Heavy**

Mideast Gulf to Asia Pacific 270,000t

Mideast Gulf to northeast Asia 130,000t

Mideast Gulf to Europe 280,000t

Mideast Gulf to Med 140,000t

Mideast Gulf to southeast Asia 130,000t

Mideast Gulf to Singapore 270,000t

Mideast Gulf to USGC 280,000t

Mideast Gulf to USWC 280,000t

Mideast Gulf to west coast India 130,000t

Mideast Gulf to west coast India 270,000t

Mideast Gulf to west coast India 80,000t

**Basrah Medium**

Mideast Gulf to Asia Pacific 270,000t

Mideast Gulf to Asia Pacific 270,000t futures month 1, 2, 3

Mideast Gulf to northeast Asia 130,000t

Mideast Gulf to Europe 280,000t

Mideast Gulf to Med 140,000t

Mideast Gulf to southeast Asia 130,000t

Mideast Gulf to Singapore 270,000t

Mideast Gulf to USGC 280,000t

Mideast Gulf to USWC 280,000t

Mideast Gulf to west coast India 130,000t

Mideast Gulf to west coast India 270,000t

Mideast Gulf to west coast India 80,000t

**Bonny Light**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to UKCM 130,000t futures month 1, 2, 3

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**BTC**

Med to Med 135,000t

Med to Med 80,000t

Med to UKC 80,000t

Med/Black Sea to east Asia 135,000t

**Cabinda**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**Castilla**

Caribbean to China 270,000t

Caribbean to west coast India 270,000t

Caribbean to Panama 145,000t

Caribbean to USGC 145,000t

Caribbean to USGC 50,000t

Caribbean to USGC 70,000t

**Cold Lake**

Vancouver to USWC 80,000t

Vancouver to west coast Panama 80,000t

Vancouver to China 80,000t

Vancouver to China 80,000t via 270,000t Panama STS

**CPC**

Black Sea to Med 135,000t

Black Sea to USGC 135,000t

Med/Black Sea to east Asia 135,000t

Black Sea to Med 80,000t

Black Sea to UKC 80,000t

**Dalia**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to USGC 130,000t

west Africa to USGC 260,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**Djeno**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**Egina**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**Ekofisk**

North Sea to east Asia 270,000t

UKC to UKC 80,000t

UKC to Med 80,000t

UKC to USAC 80,000t

**Es Sider**

Med to Med 80,000t

Med to UKC 80,000t

Med to USGC 80,000t

Med to USGC 135,000t

Med/Black Sea to east Asia 135,000t

**Escravos**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**ESPO**

Kozmino to north China 100,000t

Kozmino to Chiba 100,000t

Kozmino to Yeosu 100,000t

Kozmino to Singapore 100,000t

**Forcados**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**Forties**

North Sea to east Asia 270,000t

UKC to UKC 80,000t

UKC to Med 80,000t

UKC to USAC 80,000t

**Girassol**

west Africa to China 260,000t

west Africa to UKCM 130,000t

west Africa to east coast India 130,000t

west Africa to east coast India 260,000t

west Africa to west coast India 130,000t

west Africa to west coast India 260,000t

**Isthmus**

east coast Mexico to USGC 50,000t

east coast Mexico to USGC 70,000t

**Johan Sverdrup**

North Sea to east Asia 270,000t

UKC to UKC 80,000t

UKC to Med 80,000t

UKC to USAC 80,000t

**Kebco**

Black Sea to Med 140,000t

**Kuwait**

- Mideast Gulf to Asia Pacific 270,000t
- Mideast Gulf to northeast Asia 130,000t
- Mideast Gulf to Europe 280,000t
- Mideast Gulf to Med 140,000t
- Mideast Gulf to southeast Asia 130,000t
- Mideast Gulf to Singapore 270,000t
- Mideast Gulf to USGC 280,000t
- Mideast Gulf to west coast India 130,000t
- Mideast Gulf to west coast India 270,000t
- Mideast Gulf to west coast India 80,000t

**Liza**

- Guyana to UKC 145,000t

**Mars**

- USGC to China 130,000t
- USGC to China 270,000t
- USGC to China 270,000t (STS)
- USGC to China 270,000t (STS) futures month 1, 2, 3
- USGC to Europe 145,000t
- USGC to Med 70,000t
- USGC to Rotterdam 270,000t
- USGC to Singapore 270,000t
- USGC to South Korea/Japan 270,000t
- USGC to UKC 70,000t
- USGC to UKC 70,000t futures months 1, 2, 3
- USGC to east coast Canada 70,000t
- USGC to west coast India 270,000t

**Maya**

- east coast Mexico to USGC 50,000t
- east coast Mexico to USGC 70,000t

**Medanito**

- Argentina to USWC 65,000t
- Argentina to USAC 65,000t

**Murban**

- Mideast Gulf to Asia Pacific 270,000t
- Mideast Gulf to Asia Pacific 270,000t futures months 1, 2, 3
- Mideast Gulf to northeast Asia 130,000t
- Mideast Gulf to Europe 280,000t
- Mideast Gulf to Med 140,000t
- Mideast Gulf to southeast Asia 130,000t
- Mideast Gulf to Singapore 270,000t
- Mideast Gulf to USGC 280,000t
- Mideast Gulf to west coast India 130,000t
- Mideast Gulf to west coast India 270,000t
- Mideast Gulf to west coast India 80,000t

**Napo**

- Esmeraldas to Houston 50,000t
- Esmeraldas to Los Angeles 100,000t

**Oman**

- Mideast Gulf to Asia Pacific 270,000t
- Mideast Gulf to northeast Asia 130,000t
- Mideast Gulf to Europe 280,000t
- Mideast Gulf to Med 140,000t
- Mideast Gulf to southeast Asia 130,000t
- Mideast Gulf to Singapore 270,000t
- Mideast Gulf to USGC 280,000t
- Mideast Gulf to west coast India 130,000t
- Mideast Gulf to west coast India 270,000t
- Mideast Gulf to west coast India 80,000t

**Oriente**

- Ecuador to USWC 50,000t
- Ecuador to USWC 100,000t
- Esmeraldas to Houston 50,000t
- Esmeraldas to Los Angeles 100,000t

**Payara Gold**

- Guyana to UKC 145,000t

**Qua Iboe**

- west Africa to China 260,000t
- west Africa to UKCM 130,000t
- west Africa to USGC 130,000t
- west Africa to USGC 260,000t
- west Africa to east coast India 130,000t
- west Africa to east coast India 260,000t
- west Africa to west coast India 130,000t
- west Africa to west coast India 260,000t

**Saharan**

- Med to Med 135,000t
- Med to Med 80,000t
- Med to UKC 80,000t
- Med to USGC 80,000t
- Med to USGC 135,000t
- Med/Black Sea to east Asia 135,000t

**Tupi**

- Brazil to China 260,000t
- Brazil to USWC 260,000t
- Brazil to UKC 260,000t
- Brazil to UKC 130,000t

**Unity Gold**

- Guyana to UKC 145,000t

**Urals**

- Novorossiysk to west coast India 80,000t
- Novorossiysk to north China 80,000t
- Novorossiysk to west coast India 140,000t
- Novorossiysk to north China 140,000t
- Baseline Novorossiysk to west coast India 80,000t
- Baseline Novorossiysk to north China 80,000t
- Baseline Novorossiysk to west coast India 140,000t

- Baseline Novorossiysk to north China 140,000t
- Primorsk to west coast India 100,000t
- Primorsk to north China 100,000t
- Baseline Primorsk to west coast India 100,000t
- Baseline Primorsk to north China 100,000t

**Varandey**

- Murmansk to west coast India 140,000t
- Murmansk to north China 140,000t
- Baseline Murmansk to west coast India 140,000t
- Baseline Murmansk to north China 140,000t

**Vasconia**

- Caribbean to Panama 145,000t
- Panama to USWC 130,000t

**WCS**

- USGC to China 130,000t
- USGC to China 270,000t
- USGC to China 270,000t (STS)
- USGC to China 270,000t (STS) futures month 1, 2, 3
- USGC to Europe 145,000t
- USGC to Med 70,000t
- USGC to Rotterdam 270,000t
- USGC to Singapore 270,000t
- USGC to South Korea/Japan 270,000t
- USGC to UKC 70,000t
- USGC to UKC 70,000t futures months 1, 2, 3
- USGC to west coast India 270,000t

**WTI**

- USGC to China 130,000t
- USGC to China 270,000t
- USGC to China 270,000t (STS)
- USGC to China 270,000t (STS) futures month 1, 2, 3
- USGC to Europe 145,000t
- USGC to Med 70,000t
- USGC to Med 90,000t
- USGC to Rotterdam 270,000t
- USGC to Singapore 270,000t
- USGC to South Korea/Japan 270,000t
- USGC to UKC 70,000t
- USGC to UKC 70,000t futures months 1, 2, 3
- USGC to UKC 90,000t
- USGC to UKC 90,000t futures months 1, 2, 3
- USGC to east coast Canada 70,000t
- USGC to west coast India 270,000t

## Freight futures

Prices are of freight forward agreements (FFA), which are financially settled futures contracts.

Prices are published for the prompt month and two forward months. The prompt month rolls on the first working day of the month. For example, Argus begins publishing the January contract as the prompt month from the first working day in January.

Assessments are made in Worldscale rates and converted to \$/t using the flat rate basket for the corresponding spot market assessment.

### Freight futures assessments

Route	Size ('000t)	Timestamp
Dirty Mideast Gulf-East	270	UK, 5pm
Dirty USGC-China (STS)*	270	NY, 5pm
Dirty west Africa-UKC/Med	130	UK, 5pm
Dirty USGC-UKC**	90	NY, 5pm
Dirty USGC-UKC	70	NY, 5pm
Clean Mideast Gulf-Japan	55	UK, 5pm
Clean USGC/Caribbean-UKC/Med	38	NY, 5pm
Clean UKC-US Atlantic coast	37	UK, 5pm
Clean Cross Med	30	UK, 5pm

\*lumpsum \*\*\$/t only - calculated as the dirty USGC-UKC 70kt implied lumpsum value/90,000t

## Carbon costs

Argus Tanker Freight publishes the cost of CO2 emissions credits under the EU Emissions Trading System (EU ETS) for crude and products routes beginning and/or ending at EU ports. The cost is calculated for one-way and round-trip voyages using the following formula:

Carbon cost (\$) = voyage CO2 emissions (t) x CO2 emissions allowance price (\$/t)

CO2 emissions costs are published as lumpsums and in \$/t for all routes, and in \$/bl for crude routes.

For routes beginning and ending at EU ports, all CO2 emissions are assumed to require permits and are included in the calculation. For routes beginning or ending at EU ports, half of the CO2 emissions are assumed to require permits and are included in the calculation.

### EU ETS phase in

Shipping's inclusion in the EU ETS is being phased in over several years. Accordingly, Argus calculates costs for 40pc of voyage carbon emissions requiring permits to the end of 2024, 70pc in 2025 and 100pc thereafter.

## CO2 emissions price

The CO2 price is the Argus assessment of the December-delivery EU ETS allowance price converted to US dollars/t. See the [Argus European Emissions Markets methodology](#).

## Assumptions

Voyage CO2 emissions are based on the type and amount of fuel consumed on each voyage, which varies depending on ship operation and whether at sea, within Emissions Control Areas (ECAs) or at port.

Vessel speeds, loading and unloading times, preferences for or against canal transits, and other components of the calculations are the same as those assumed in other calculated freight rates for

- Crude
- Products

Note, Argus assumes the following for Panamax and Supramax dry-bulk CO2 calculations.

Argus assumes the following CO2 emissions per tonne of fuel burned:

- HSFO: 3.114t CO2/t fuel
- LSFO: 3.151t CO2/t fuel
- MGO: 3.206t CO2/t fuel

All assumptions are under continual review and are updated at least once a year.

## Routes covered

Note, dirty tanker \$/bl costs assume the vessel is carrying the named crude.

### Dirty

- Ras Tanura-Rotterdam (via Suez) 280kt VLCC (Arab Light)
- Bonny-Rotterdam 130kt Suezmax (Bonny Light)
- Houston-Rotterdam 70kt Aframax (WTI)

### Clean

- Ras Tanura-Rotterdam (via Suez) 65kt LR1
- Rotterdam-New York 37kt MR
- Houston-Rotterdam 38kt MR



Dirty freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
<b>Middle East/East Asia</b>					
Mideast Gulf-UKC/Med	280	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports; Mediterranean from Gibraltar to Canakkale/Dardanelles	15-30 days	UK, 5pm
Mideast Gulf-USGC	280	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Gulf of Mexico centred on the Loop crude discharge terminal	15-30 days	UK, 5pm
Mideast Gulf-USWC	280	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	US west coast	15-30 days	UK, 5pm
Mideast Gulf-East	270	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	China (including Hong Kong), South Korea, Taiwan and Japan	15-30 days	UK, 5pm
Mideast Gulf-Singapore	270	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Singapore	15-30 days	UK, 5pm
Mideast Gulf-west coast India	270	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	west coast India	15-30 days	UK, 5pm
Mideast Gulf-Med	140	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Mediterranean from Gibraltar to Canakkale/Dardanelles	15-30 days	UK, 5pm
Mideast Gulf-northeast Asia	130	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	China (including Hong Kong), South Korea, Taiwan and Japan	15-30 days	SGP, 4.30pm
Mideast Gulf-southeast Asia	130	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Singapore, Malaysia, Thailand, Vietnam and Brunei	15-30 days	SGP, 4.30pm
Mideast Gulf-west coast India	130	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	west coast India	10-20 days	SGP, 4.30pm
Mideast Gulf-northeast Asia	80	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	China (including Hong Kong), South Korea, Taiwan and Japan	15-30 days	SGP, 4.30pm
Mideast Gulf-southeast Asia	80	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Singapore, Malaysia, Thailand, Vietnam and Brunei	15-30 days	SGP, 4.30pm
Mideast Gulf-west coast India	80	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	west coast India	15-30 days	SGP, 4.30pm
Red Sea-China 80,000t	80	Red Sea	China	15-30 days	SGP, 4.30pm
<b>Northern Europe</b>					
North Sea-northeast Asia*	270	loading locations of Hound Point, Scapa Flow Southwold, and Skaw	China, South Korea and Japan	30-40 days	UK, 5pm
<i>Note: VLCC fuel oil shipments from ARA (Amsterdam-Rotterdam-Antwerp) to Singapore will not contribute to this assessment.</i>					
Murmansk-north China	140	Murmansk (Russian-origin)	Yingkou in Liaoning province to Rizhao in Shandong province	7-20 days	UK, 5pm
Murmansk-west coast India	140	Murmansk (Russian-origin)	west coast India	7-20 days	UK, 5pm
Baltic-Med	100	ports in Finland, Estonia, Latvia, Lithuania, Poland, Baltic Germany and Baltic Sweden	Gibraltar to Canakkale/Dardanelles	7-20 days	UK, 5pm
Baltic-UKC	100	ports in Finland, Estonia, Latvia, Lithuania, Poland, Baltic Germany and Baltic Sweden	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	10-20 days	UK, 5pm
Primorsk-north China	100	Primorsk (Russian-origin)	Yingkou in Liaoning province to Rizhao in Shandong province	7-20 days	UK, 5pm
Primorsk-west coast India	100	Primorsk (Russian-origin)	west coast India	7-20 days	UK, 5pm
Cross UKC	80	from one port to another port in northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports		7-20 days	UK, 5pm
Cross UKC - weighted average**	80	from one port to another port in northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports		7-20 days	UK, 5pm
UKC-Med	80	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	Gibraltar to Canakkale/Dardanelles	7-20 days	UK, 5pm
UKC-US Atlantic coast	80	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	US Atlantic coast north of Cape Hatteras to Portland, Maine centred on Philadelphia, New York and Boston	7-20 days	UK, 5pm
UKC-US Gulf, fuel oil	55	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	Gulf of Mexico centred on the Loop crude discharge terminal	7-10 days	UK, 5pm
ARA-Azores, fuel oil	30	Amsterdam-Rotterdam-Antwerp	Ponta Delgada	5-14 days	UK, 5pm

\*lumpsum \*\*weighted by previous year's loading programmes, for use in North Sea crude pricing

**Dirty freight rate specifications**

Assessment	Size ('000t)	Origin	Destination	Timing	Time
<b>Black Sea and Mediterranean</b>					
Black Sea-east Asia*	135	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	Singapore, China (including Hong Kong), South Korea, Taiwan and Japan	10-14 days	UK, 5pm
Novorossiysk-north China	140	Novorossiysk (Russian-origin)	Yingkou in Liaoning province to Rizhao in Shandong province	10-14 days	UK, 5pm
Black Sea-Med	140	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	Gibraltar to Canakkale/Dardanelles	15-20 days	UK, 5pm
Black Sea-Med	135	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	Gibraltar to Canakkale/Dardanelles	15-20 days	UK, 5pm
Black Sea-Singapore*	135	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	Singapore	10-14 days	UK, 5pm
Black Sea-west coast India	135	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	west coast India	10-14 days	UK, 5pm
Novorossiysk-west coast India	140	Novorossiysk (Russian-origin)	west coast India	10-14 days	UK, 5pm
Cross Med	135	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		10-14 days	UK, 5pm
Med/Black Sea-east Asia*	135	An average of the Med-East 135,000t and Black Sea-East 135,000t dirty tanker rates			
Med-USGC*	135	Gibraltar to Canakkale/Dardanelles	Gulf of Mexico centred on the Loop crude discharge terminal	10-14 days	UK, 5pm
Med-east Asia*	135	Gibraltar to Canakkale/Dardanelles	Singapore, China (including Hong Kong), South Korea, Taiwan and Japan	10-14 days	UK, 5pm
Med-Singapore*	135	Gibraltar to Canakkale/Dardanelles	Singapore	10-14 days	UK, 5pm
Black Sea-Med	80	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	Gibraltar to Canakkale/Dardanelles	15-20 days	UK, 5pm
Novorossiysk-north China	80	Novorossiysk (Russian-origin)	Yingkou in Liaoning province to Rizhao in Shandong province	10-14 days	UK, 5pm
Novorossiysk-west coast India	80	Novorossiysk (Russian-origin)	west coast India	10-14 days	UK, 5pm
Black Sea-UKC	80	Black Sea ports north and east of the Bosphorus (non-Russian cargo)**	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	15-20 days	UK, 5pm
Cross Med	80	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		10-14 days	UK, 5pm
Med-USGC*	80	Gibraltar to Canakkale/Dardanelles	Gulf of Mexico centred on the Loop crude discharge terminal	10-25 days	UK, 5pm
Med-UKC	80	Gibraltar to Canakkale/Dardanelles	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-14 days	UK, 5pm
Med-US Gulf, fuel oil	55	Gibraltar to Canakkale/Dardanelles	Gulf of Mexico centred on the Loop crude discharge terminal	10-14 days	UK, 5pm
Cross Med, fuel oil	30	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		10-14 days	UK, 5pm
Med-Madeira, fuel oil	30	Gibraltar to Canakkale/Dardanelles	Funchal	5-14 days	UK, 5pm
<i>*lumpsum **non-Russian cargoes are those not produced in the Russian Federation, not blended with anything produced in the Russian Federation and not exported from the Russian Federation</i>					
<b>West Africa</b>					
West Africa-China	260	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin	China	30-40 days	UK, 5pm
West Africa-east coast India*	260	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin	east coast India	30-40 days	UK, 5pm
West Africa-Singapore	260	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin	Singapore	30-40 days	UK, 5pm
West Africa-USGC	260	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin	Gulf of Mexico centred on the Loop crude discharge terminal	30-40 days	UK, 5pm
West Africa-west coast India*	260	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin	west coast India	30-40 days	UK, 5pm

Dirty freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
West Africa-east coast India*	130	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin - includes port fees, assuming loading in Nigeria	east coast India	15-30 days	UK, 5pm
West Africa-India*	130	Calculated as the average of the 130,000t West Africa-east coast India and West Africa-west coast India rates		15-30 days	UK, 5pm
West Africa-UKC/Med	130	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin	Northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports; Mediterranean from Gibraltar to Canakkale/Dardanelles	15-30 days	UK, 5pm
West Africa-US Gulf	130	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin - includes port fees, assuming loading in Nigeria	Gulf of Mexico centred on the Loop crude discharge terminal	15-30 days	UK, 5pm
West Africa-west coast India*	130	Gulf of Guinea, centred on the crude loading terminals located in the Bight of Bonny and Bight of Benin - includes port fees, assuming loading in Nigeria	west coast India	15-30 days	UK, 5pm
<i>*lumpsum</i>					
<b>Americas</b>					
Caribbean-China*	270	Venezuela, Colombian Atlantic coast, and Caribbean islands	Chinese coast from Hong Kong to Ningbo	20-50 days	NY, 5pm
Caribbean-Singapore*	270	Venezuela, Colombian Atlantic coast, and Caribbean islands	Singapore	20-50 days	NY, 5pm
Caribbean-west coast India*	270	Venezuela, Colombian Atlantic coast, and Caribbean islands	west coast India	20-50 days	NY, 5pm
USGC-China*†	270	US Gulf coast from Texas to Alabama, including US offshore ports	Chinese coast from Hong Kong to Ningbo	20-50 days	NY, 5pm
USGC-China (STS)**	270	US Gulf coast loading via ship-to-ship transfer	Chinese coast from Hong Kong to Ningbo	20-60 days	NY, 5pm
USGC-Rotterdam*†	270	US Gulf coast from Texas to Alabama, including US offshore ports	Rotterdam	20-50 days	NY, 5pm
USGC-Singapore*†	270	US Gulf coast from Texas to Alabama, including US offshore ports	Singapore	20-50 days	NY, 5pm
USGC-South Korea/Japan*†	270	US Gulf coast from Texas to Alabama, including US offshore ports	South Korea/Japan	20-50 days	NY, 5pm
USGC-west coast India*†	270	US Gulf coast from Texas to Alabama, including US offshore ports	west coast India	20-50 days	NY, 5pm
West coast Panama-China	270	Panamanian Pacific coast	Chinese coast from Hong Kong to Ningbo	20-50 days	NY, 5pm
Brazil-China	260	Brazil	Chinese coast from Hong Kong to Ningbo	20-40 days	NY, 5pm
Brazil-USWC	260	Brazil	US west coast from Los Angeles to San Francisco	20-40 days	NY, 5pm
Brazil-UKC	260	Brazil	Gibraltar to Hamburg, includes United Kingdom and the North Sea ports	20-40 days	NY, 5pm
Brazil-UKC	130	Brazil	Gibraltar to Hamburg, includes United Kingdom and the North Sea ports	7-25 days	NY, 5pm
Caribbean-UKC	145	Venezuela, Colombian Atlantic coast, and Caribbean islands	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	7-25 days	NY, 5pm
USGC-Europe	145	US Gulf coast from Texas to Alabama, including US offshore ports	Europe is from Hamburg, through Gibraltar to Canakkale/Dardanelles on the Mediterranean, and includes the United Kingdom and the North Sea ports	7-25 days	NY, 5pm
Caribbean-Panama	145	Venezuela, Colombian Atlantic coast, and Caribbean islands	Panamanian Atlantic coast	7-25 days	NY, 5pm
Caribbean-USGC	145	Venezuela, Colombian Atlantic coast, and Caribbean islands	US Gulf coast from Texas to Alabama, including US offshore ports	7-25 days	NY, 5pm
Guyana-Panama	145	Guyana	Panamanian Atlantic coast	7-25 days	NY, 5pm
Guyana-UKC	145	Guyana	Gibraltar to Hamburg, includes United Kingdom and the North Sea ports. The \$/t rate is normalised to Rotterdam discharge	7-25 days	NY, 5pm
Panama-US west coast	130	Panamanian Pacific coast	US west coast from Los Angeles to San Francisco	10-25 days	NY, 5pm
USGC/Caribbean-Singapore*	130	US Gulf coast from Texas to Alabama, including US offshore ports, and Venezuela, Colombian Atlantic coast, and Caribbean islands	Singapore	7-25 days	NY, 5pm

Dirty freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
USGC-China*	130	US Gulf coast from Texas to Alabama, including US offshore ports	Chinese coast from Hong Kong to Ningbo	7-25 days	NY, 5pm
Ecuador-USWC	100	Ecuador	US west coast from Los Angeles to San Francisco	5-15 days	NY, 5pm
Esmeraldas-Los Angeles	100	See the oil and products TCE assessments section above			
Vancouver-China	80	Vancouver, British Columbia	Chinese coast from Hong Kong to Ningbo	5-22 days	NY, 5pm
Vancouver-China via 270kt Panama STS****	80	Vancouver, British Columbia	Chinese coast from Hong Kong to Ningbo	5-22 days	NY, 5pm
Vancouver-Panama	80	Vancouver, British Columbia	Panamanian Pacific coast	5-22 days	NY, 5pm
Vancouver-US west coast	80	Vancouver, British Columbia	US west coast from Los Angeles to San Francisco	5-22 days	NY, 5pm
Caribbean-UKC	70	Venezuela, Colombian Atlantic coast, and Caribbean islands	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-22 days	NY, 5pm
Caribbean-USGC	50	Venezuela, Colombian Atlantic coast, and Caribbean islands	US Gulf coast from Texas to Alabama, including US offshore ports	5-15 days	NY, 5pm
East coast Mexico-USGC	50	Mexican Atlantic coast	US Gulf coast from Texas to Alabama, including US offshore ports	5-15 days	NY, 5pm
USGC-east coast Canada	70	US Gulf coast from Texas to Alabama, including US offshore ports	Canadian coast from New Brunswick to Newfoundland	5-22 days	NY, 5pm
USGC-Med**	90	US Gulf coast from Texas to Alabama, including US offshore ports	Mediterranean from Gibraltar to Canakkale/Dardanelles. The \$/t rate is normalised to Trieste discharge	5-22 days	NY, 5pm
USGC-Med	70	US Gulf coast from Texas to Alabama, including US offshore ports	Mediterranean from Gibraltar to Canakkale/Dardanelles. The \$/t rate is normalised to Trieste discharge	5-22 days	NY, 5pm
USGC-UKC**	90	US Gulf coast from Texas to Alabama, including US offshore ports	Gibraltar to Hamburg, includes United Kingdom and the North Sea ports. The \$/t rate is normalised to Rotterdam discharge	5-22 days	NY, 5pm
USGC-UKC	70	US Gulf coast from Texas to Alabama, including US offshore ports	Gibraltar to Hamburg, includes United Kingdom and the North Sea ports. The \$/t rate is normalised to Rotterdam discharge	5-22 days	NY, 5pm
Caribbean-USGC	70	Venezuela, Colombian Atlantic coast, and Caribbean islands	Gulf of Mexico centred on the Loop crude discharge terminal	7-10 days	NY, 5pm
East coast Mexico-USGC	70	Mexican Atlantic coast	US Gulf coast from Texas to Alabama, including US offshore ports	5-22 days	NY, 5pm
Argentina-US west coast***	65	Puerto Rosales	US west coast from Los Angeles to Anacortes	18-45 days	NY, 5pm
Argentina-US Atlantic coast***	65	Puerto Rosales	US Atlantic coast from Delaware City to Marcus Hook	18-45 days	NY, 5pm
Argentina-US west coast****	50	Puerto Rosales	US west coast from Los Angeles to Anacortes	18-45 days	NY, 5pm
Argentina-US Atlantic coast****	50	Puerto Rosales	US Atlantic coast from Delaware City to Marcus Hook	18-45 days	NY, 5pm
Ecuador-US west coast	50	Ecuador	US west coast from Los Angeles to San Francisco	5-15 days	NY, 5pm
Esmeraldas-Houston	50	See the oil and products TCE assessments section above			
US Gulf coast Aframax reverse lightering*		Daily assessment of the lumpsum cost to charter one Aframax tanker for a three-day period to reverse lighter, or deliver crude via ship-to-ship transfer (STS) onto a larger tanker in the US Gulf from a US load port. US Gulf coast load ports range from Texas to Alabama, including Corpus Christi, Houston, and Beaumont/Nederland. Ports on the Mississippi river are excluded		2-14 days	NY, 5pm

\*lumpsum, \*\*includes port fees associated with partial VLCC loadings in the US Gulf coast, \*\*\*assessed as a differential to the USGC-China 270,000t (lumpsum) rate, \*\*\*\*\$/t only - calculated as the dirty USGC-UKC or USGC-Med 70kt implied lumpsum value/90,000t, \*\*\*\*\*\$/t only - calculated as the dirty Argentina-USWC or Argentina-USAC 50kt implied lumpsum value \* 1.15/65,000t, assuming overage charged at half price, \*\*\*\* published in Worldscale only \*\*\*\*\*\$/t only - calculated as sum of Vancouver to Panama 80kt \$/t, west coast Panama to China 270kt \$/t and ship-to-ship transfer costs

Asia-Pacific					
Kozmino-Chiba*	100	the Russian far east port of Kozmino on the Sea of Japan	Chiba, Japan	15-30 days	SGP, 4.30pm
Kozmino-north China*	100	the Russian far east port of Kozmino on the Sea of Japan	ports located from Yingkou in Liaoning province to Qingdao in Shandong province on the east coast of China	15-30 days	SGP, 4.30pm

**Dirty freight rate specifications**

Assessment	Size ('000t)	Origin	Destination	Timing	Time
Kozmino-Singapore*	100	the Russian far east port of Kozmino on the Sea of Japan	Singapore	15-30 days	SGP, 4.30pm
Kozmino-Yeosu*	100	the Russian far east port of Kozmino on the Sea of Japan	Yeosu, South Korea	15-30 days	SGP, 4.30pm
Yeosu STS to Paradip	100	Yeosu, South Korea	Paradip, India	7-25 days	SGP, 4.30pm
Yeosu STS to Vadinar	100	Yeosu, South Korea	Vadinar, India	7-25 days	SGP, 4.30pm
Yeosu STS to Mundra	100	Yeosu, South Korea	Mundra, India	7-25 days	SGP, 4.30pm
Yeosu STS to Chennai	100	Yeosu, South Korea	Chennai, India	7-25 days	SGP, 4.30pm
Indonesia-Japan	80	Indonesia	Japan	15-30 days	SGP, 4.30pm
SE Asia-east coast Australia	80	ports in the region around Indonesia and Malaysia, including Singapore	east coast Australia	15-30 days	SGP, 4.30pm

\*lumpsum

Clean freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
<b>Middle East/East Asia</b>					
Mideast Gulf-UKC*	90	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	15-30 days	UK, 5pm
Red Sea-Mediterranean*	90	Red Sea	Gibraltar to Canakkale/Dardanelles	10-25 days	UK, 5pm
Red Sea-UKC*	90	Red Sea	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	10-25 days	UK, 5pm
Mideast Gulf-South Korea	75	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	South Korea	15-30 days	SGP, 4.30pm
Mideast Gulf-Japan	75	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Japan	15-30 days	SGP, 4.30pm
Mideast Gulf-UKC*	65	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	15-30 days	UK, 5pm
Red Sea-Mediterranean*	65	Red Sea	Gibraltar to Canakkale/Dardanelles	10-25 days	UK, 5pm
Red Sea-UKC*	65	Red Sea	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	10-25 days	UK, 5pm
Mideast Gulf-South Korea	55	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	South Korea	15-30 days	SGP, 4.30pm
Mideast Gulf-Japan	55	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Japan	15-30 days	SGP, 4.30pm
Mideast Gulf-Singapore, gasoil	55	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Singapore	15-30 days	SGP, 4.30pm
Mideast Gulf-UKC*	40	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-15 days	UK, 5pm
Mideast Gulf-Brazil*	40	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Brazil	5-15 days	UK, 5pm
Mideast Gulf-Durban	35	Mideast Gulf to Durban is calculated by applying the Mideast Gulf to east Africa 35,000t daily Worldscale spot rate assessment, minus a differential to reflect the longer voyage, to a basket of typical Worldscale flat rates for Mideast Gulf ports to Durban. Mideast Gulf refers to all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz). Assessments are made in \$/t.			
Mideast Gulf-Durban (including anti-piracy fee)	35	Mideast Gulf to Durban is calculated by applying the Mideast Gulf to east Africa (including anti-piracy fee) 35,000t daily Worldscale spot rate assessment, minus a differential to reflect the longer voyage, to a basket of typical Worldscale flat rates for Mideast Gulf ports to Durban. Mideast Gulf refers to all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz). Assessments are made in \$/t.			
Mideast Gulf-east Africa	35	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	a range of ports from Mombasa to Dar es Salaam	5-15 days	SGP, 4.30pm
Mideast Gulf-east Africa (including anti-piracy fee)	35	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	a range of ports from Mombasa to Dar es Salaam	5-15 days	SGP, 4.30pm
Mideast Gulf-east coast India**	35	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	east coast India	5-20 days	SGP, 4.30pm
Mideast Gulf-Japan	35	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Japan	15-30 days	SGP, 4.30pm
Mideast Gulf-Singapore	35	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	Singapore	15-30 days	SGP, 4.30pm
Mideast Gulf-Walvis Bay	35	Mideast Gulf to Walvis Bay is calculated by multiplying the percentage of the Mideast Gulf to east Africa 35,000t daily Worldscale spot rate assessments to a basket of typical Worldscale flat rates for Mideast Gulf ports to Walvis Bay. Mideast Gulf refers to all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz). Assessments are made in \$/t.			
Mideast Gulf-Walvis Bay (including anti-piracy fee)	35	Mideast Gulf to Walvis Bay is calculated by multiplying the percentage of the Mideast Gulf to east Africa (including anti-piracy fee) 35,000t daily Worldscale spot rate assessments to a basket of typical Worldscale flat rates for Mideast Gulf ports to Walvis Bay. Mideast Gulf refers to all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz). Assessments are made in \$/t.			
Mideast Gulf-west coast India**	35	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	west coast India	5-20 days	SGP, 4.30pm

\*lumpsum, \*\*assessed and published as lumpsums and are also converted to Worldscale and \$/t values for publication



Clean freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
<b>Northern Europe</b>					
UKC-west Africa	60	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	range of ports centred on Bonny and Lagos	7-20 days	UK, 5pm
ARA-Durban	37	ARA to Durban is calculated by multiplying the percentage of the UKC to west Africa 37,000t daily Worldscale spot rate assessments to a basket of typical Worldscale flat rates for ARA ports to Durban. ARA refers to the Antwerp/Rotterdam/Amsterdam range of ports. Assessments are made in \$/t.			
ARA-Walvis Bay	37	ARA to Walvis Bay is calculated by multiplying the percentage of the UKC to west Africa 37,000t daily Worldscale spot rate assessments to a basket of typical Worldscale flat rates for ARA ports to Walvis Bay. ARA refers to the Antwerp/Rotterdam/Amsterdam range of ports. Assessments are made in \$/t.			
UKC-east coast Mexico	37	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	ports of Tuxpan, Tampico, Pajaritos and Ciudad Madero	5-14 days	UK, 5pm
UKC-South America	37	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	Atlantic coast ports ranging from northern Brazil to northern Argentina	5-14 days	UK, 5pm
UKC-US Atlantic coast	37	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	US Atlantic coast north of Cape Hatteras to Portland, Maine centred on Philadelphia, New York and Boston	7-10 days	UK, 5pm
UKC-west Africa	37	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	range of ports centred on Bonny and Lagos	5-14 days	UK, 5pm
Russian Baltic-west Africa	37	Russian Baltic ports	range of ports centred on Bonny and Lagos	5-20 days	UK, 5pm
Russian Baltic-Mediterranean	37	Russian Baltic ports	Gibraltar to Canakkale/Dardanelles	5-20 days	UK, 5pm
Russian Baltic-Brazil	37	Russian Baltic ports	Brazil	5-20 days	UK, 5pm
Russian Baltic-Caribbean	37	Russian Baltic ports	Venezuela, Colombian Atlantic coast, Panamanian Atlantic coast, and Caribbean islands	5-20 days	UK, 5pm
Russian Baltic-Mideast Gulf*	37	Russian Baltic ports	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	5-20 days	UK, 5pm
Russian Baltic-Singapore*	37	Russian Baltic ports	Singapore	5-20 days	UK, 5pm
Russian Baltic-west coast India*	37	Russian Baltic ports	west coast India	5-20 days	UK, 5pm
Baltic-UKC	30	ports in Finland, Estonia, Latvia, Lithuania, Poland, Baltic Germany and Baltic Sweden	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	7-10 days	UK, 5pm
Cross UKC	30	from one port to another port in northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports		5-14 days	UK, 5pm
Cross UKC	22	from one port to another port in northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports		5-14 days	UK, 5pm
<b>Black Sea and Mediterranean</b>					
Med-Japan*	80	Gibraltar to Canakkale/Dardanelles	Japan	15-30 days	UK, 5pm
Med-Japan*	60	Gibraltar to Canakkale/Dardanelles	Japan	15-30 days	UK, 5pm
Med-US Atlantic coast	37	Gibraltar to Canakkale/Dardanelles	north of Cape Hatteras to Portland, Maine centred on Philadelphia, New York and Boston	5-14 days	UK, 5pm
Russian Black Sea-west Africa	37	Russian Black Sea ports	range of ports centred on Bonny and Lagos	10-20 days	UK, 5pm
Russian Black Sea-Mideast Gulf*	37	Russian Black Sea ports	all ports in the Arab Gulf/Persian Gulf up to Quoin Island (Straits of Hormuz)	10-20 days	UK, 5pm
Russian Black Sea-Mediterranean	33	Russian Black Sea ports	Gibraltar to Canakkale/Dardanelles	10-20 days	UK, 5pm
Black Sea-Med	30	Black Sea ports north and east of the Bosphorus (non-Russian cargo)†	Gibraltar to Canakkale/Dardanelles	5-14 days	UK, 5pm
Cross Med	30	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm
Cross Med gasoline (inc gasoline premium)	30	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm

Clean freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
Cross Med jet (inc jet premium)	30	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm
Cross Med naphtha (inc naphtha premium)	30	from one port to another port in the Mediterranean from Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm
Med gasoline premium**	30	Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm
Med jet premium**	30	Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm
Med naphtha premium**	30	Gibraltar to Canakkale/Dardanelles		5-14 days	UK, 5pm
Med-UKC	30	Gibraltar to Canakkale/Dardanelles	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-14 days	UK, 5pm
Med-UKC gasoline	30	Gibraltar to Canakkale/Dardanelles	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-14 days	UK, 5pm
Med-UKC jet	30	Gibraltar to Canakkale/Dardanelles	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-14 days	UK, 5pm
Med-UKC naphtha	30	Gibraltar to Canakkale/Dardanelles	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	5-14 days	UK, 5pm
East Med-Ukraine <sup>††</sup>	5-6	Greece and Turkey	Ukraine	7-21 days	UK, 5pm
*Lumpsum, **Premiums are as currently available in the market for the relevant commodity expressed in Worldscale spot rates points <sup>†</sup> non-Russian cargoes are those not produced in the Russian Federation, not blended with anything produced in the Russian Federation and not exported from the Russian Federation <sup>††</sup> \$/t only					
<b>Americas</b>					
<b>Worldscale</b>					
USGC-Brazil	60	centred on the export ports around the Gulf of Mexico	Brazil	5-21 days	NY, 5pm
USGC-north Brazil <sup>*</sup>	60	centred on the export ports around the Gulf of Mexico	Brazilian ports to the north of and including Suape	5-21 days	NY, 5pm
USGC-south Brazil <sup>*</sup>	60	centred on the export ports around the Gulf of Mexico	Brazilian ports to the south of and including Suape	5-21 days	NY, 5pm
USGC-UKC	60	centred on the export ports around the Gulf of Mexico	Gibraltar to Hamburg, includes United Kingdom and the North Sea ports, centred on ARA (Amsterdam-Rotterdam-Antwerp)	5-21 days	NY, 5pm
Caribbean-USAC	38	centred on the export ports in and around northern Venezuela	US Atlantic coast north of Cape Hatteras to Portland, Maine centred on Philadelphia, New York and Boston	3-10 days	NY, 5pm
USAC-UKC	38	US Atlantic coast north of Cape Hatteras to Portland, Maine centred on Philadelphia, New York and Boston	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	3-10 days	NY, 5pm
USGC/Caribbean-UKCM	38	USGC is centred on the export ports around the Gulf of Mexico, Caribbean is centred on the export ports in and around northern Venezuela	Northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports; Mediterranean from Gibraltar to Canakkale/Dardanelles	3-10 days	NY, 5pm
USGC-Argentina/Uruguay <sup>*</sup>	38	centred on the export ports around the Gulf of Mexico	Argentina and Uruguay	3-10 days	NY, 5pm
USGC-east coast Canada	38	centred on the export ports around the Gulf of Mexico	Canadian east coast from New Brunswick to Newfoundland	3-10 days	NY, 5pm
USGC-east coast South America	38	centred on the export ports around the Gulf of Mexico	Brazil, Argentina, and Uruguay	3-10 days	NY, 5pm
USGC-north Brazil <sup>*</sup>	38	centred on the export ports around the Gulf of Mexico	Brazilian ports to the north of and including Suape	3-10 days	NY, 5pm
USGC-south Brazil <sup>*</sup>	38	centred on the export ports around the Gulf of Mexico	Brazilian ports to the south of and excluding Suape	3-10 days	NY, 5pm

\*Published in \$/t only

Clean freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
<b>Lumpsum</b>					
USGC-Japan	60	centred on the export ports around the Gulf of Mexico	Japan	5-21 days	NY, 5pm
East coast Canada-USAC	38	centred on Quebec City, Quebec	US Atlantic coast north of Cape Hatteras to Portland, Maine centred on Philadelphia, New York and Boston	3-10 days	NY, 5pm
USGC-Chile	38	centred on the export ports around the Gulf of Mexico	Chilean coast from Coronel to but excluding Quintero	3-10 days	NY, 5pm
USGC-Calbuco diff to USGC-Chile	38	centred on the export ports around the Gulf of Mexico	Chilean coast from Calbuco to but excluding Coronel	3-10 days	NY, 5pm
USGC-Caldera diff to USGC-Chile	38	centred on the export ports around the Gulf of Mexico	Chilean coast from Caldera to but excluding Mejillones/Antofagasta	3-10 days	NY, 5pm
USGC-Mejillones/Antofagasta diff to USGC-Chile	38	centred on the export ports around the Gulf of Mexico	Chilean coast north of and including Mejillones/Antofagasta	3-10 days	NY, 5pm
USGC-Quintero diff to USGC-Chile	38	centred on the export ports around the Gulf of Mexico	Chilean coast from Quintero to but excluding Caldera	3-10 days	NY, 5pm
USGC-Dominican Republic	38	centred on the export ports around the Gulf of Mexico	Dominican Republic	3-10 days	NY, 5pm
USGC-east coast of Mexico	38	centred on the export ports around the Gulf of Mexico	ports of Tuxpan, Tampico, Pajaritos and Ciudad Madero	3-10 days	NY, 5pm
USGC-Ecuador	38	centred on the export ports around the Gulf of Mexico	Ecuador	3-10 days	NY, 5pm
USGC-Japan	38	centred on the export ports around the Gulf of Mexico	ports of Mizushima, Chiba and Kashima	3-10 days	NY, 5pm
USGC-Las Minas	38	centred on the export ports around the Gulf of Mexico	Las Minas on the Atlantic coast of Panama	3-10 days	NY, 5pm
USGC-Lazaro Cardenas	38	centred on the export ports around the Gulf of Mexico	Mexican west coast south of and including Lazaro Cardenas	3-10 days	NY, 5pm
USGC-Peru	38	centred on the export ports around the Gulf of Mexico	Peruvian coast south of and excluding Callao and Conchan	3-10 days	NY, 5pm
USGC-Callao/Conchan diff to USGC-Peru	38	centred on the export ports around the Gulf of Mexico	Peruvian coast north of and including ports of Callao and Conchan	3-10 days	NY, 5pm
USGC-Pozos	38	centred on the export ports around the Gulf of Mexico	Pozos, Colorados in Colombia	3-10 days	NY, 5pm
USGC-Barranquilla diff to USGC-Pozos	38	centred on the export ports around the Gulf of Mexico	Barranquilla, Colombia	3-10 days	NY, 5pm
USGC-Bolivar diff to USGC-Pozos	38	centred on the export ports around the Gulf of Mexico	Bolivar, Colombia	3-10 days	NY, 5pm
USGC-Cartagena diff to USGC-Pozos	38	centred on the export ports around the Gulf of Mexico	Cartagena, Colombia	3-10 days	NY, 5pm
USGC-Rosarito	38	centred on the export ports around the Gulf of Mexico	Rosarito, on the Pacific coast of northern Mexico	3-10 days	NY, 5pm
USWC-Chile	38	US west coast from San Francisco to Los Angeles	Chilean coast from Coronel to but excluding Quintero	7-15 days	NY, 5pm
USWC-Calbuco diff to USWC-Chile	38	US west coast from San Francisco to Los Angeles	Chilean coast from Calbuco to but excluding Coronel	7-15 days	NY, 5pm
USWC-Caldera diff to USWC-Chile	38	US west coast from San Francisco to Los Angeles	Chilean coast from Caldera to but excluding Mejillones/Antofagasta	7-15 days	NY, 5pm
USWC-Mejillones/Antofagasta diff to USWC-Chile	38	US west coast from San Francisco to Los Angeles	Chilean coast north of and including Mejillones/Antofagasta	7-15 days	NY, 5pm
USWC-Quintero diff to USWC-Chile	38	US west coast from San Francisco to Los Angeles	Chilean coast from Quintero to but excluding Caldera	7-15 days	NY, 5pm

Clean freight rate specifications					
Assessment	Size ('000t)	Origin	Destination	Timing	Time
USWC-Lazaro Cardenas	38	US west coast from San Francisco to Los Angeles	Mexican west coast south of and including Lazaro Cardenas	7-15 days	NY, 5pm
USWC-Rosarito	38	US west coast from San Francisco to Los Angeles	Mexican west coast from Rosarito to but excluding Lazaro Cardenas	7-15 days	NY, 5pm
USWC-Topolobampo*	19	US west coast from San Francisco to Los Angeles	Topolobampo	7-15 days	NY, 5pm
USGC-Guaymas*	12	centered on the export ports around the Gulf of Mexico	Guaymas	3-10 days	NY, 5pm
USWC-Guaymas*	12	US west coast from San Francisco to Los Angeles	Guaymas	7-15 days	NY, 5pm
*Assessed in \$/t, medium range (MR) vessels, assumes partial discharge of the stated cargo size					
Asia-Pacific					
west coast India-south Brazil*	90	west coast India	Brazilian ports to the south of and including Suape	10-25 days	UK, 5pm
west coast India-UKC*	90	west coast India	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	10-25 days	UK, 5pm
west coast India-south Brazil*	65	west coast India	Brazilian ports to the south of and including Suape	10-25 days	UK, 5pm
west coast India-UKC*	65	west coast India	northwest Europe from Le Havre to Hamburg, centred on ARA (Amsterdam-Rotterdam-Antwerp), and the North Sea ports	10-25 days	UK, 5pm
west coast India-south Brazil*	40	west coast India	Brazilian ports to the south of and excluding Suape	5-15 days	UK, 5pm
SE Asia-east coast Australia	35	ports in the region around Indonesia and Malaysia, including Singapore	east coast Australia	15-30 days	SGP, 4.30pm
South Korea-Australia/New Zealand	35	South Korea	east coast Australia and New Zealand	15-30 days	SGP, 4.30pm
South Korea-Chile*	35	South Korea	Chilean coast from Coronel to but excluding Quintero	10-25 days	SGP, 4.30pm
South Korea-east coast Australia**	35	South Korea	east coast Australia	15-30 days	SGP, 4.30pm
South Korea-New Zealand**	35	South Korea	New Zealand	15-30 days	SGP, 4.30pm
South Korea-Singapore*	35	South Korea	Singapore	15-30 days	SGP, 4.30pm
South Korea-US west coast*	35	South Korea	US west coast	15-30 days	SGP, 4.30pm
north China to east coast Australia	35	Yingkou in Liaoning province to Rizhao in Shandong province	east coast Australia	10-25 days	SGP, 4.30pm
north China to west coast Australia	35	Yingkou in Liaoning province to Rizhao in Shandong province	west coast Australia	10-25 days	SGP, 4.30pm
SE Asia-east coast Australia	30	ports in the region around Indonesia and Malaysia, including Singapore	east coast Australia	15-30 days	SGP, 4.30pm
Singapore-Japan	30	Singapore	Japan	15-30 days	SGP, 4.30pm

\*lumpsum, \*\*\$/t only