

# *Methodology and Specifications Guide*

## *Russian Domestic Market*

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**LATEST UPDATE: DECEMBER 2011**

## GENERAL TERMS AND CONDITIONS

### GENERAL

Platts introduced daily assessments of the Russian domestic market for crude and products in 2006. The key price formation centers in Platts' Russian domestic crude assessments are Ufa and Surgut, while in its products coverage assessments are made basis Ufa and Moscow.

As for its international oil assessments, Platts uses a market-on-close assessment methodology, recognizing that prices are a function of time and that the outright price will vary with market conditions on a daily and intraday basis. Bids and offers for Russian domestic crude grades are published on Platts Global Alert electronic screen service page 3 <PGA003> and for Russian oil products on page 5 <PGA005>.

Platts specifications guide provides details of specifications currently reflected in the daily assessments. Because standards are evolving, however, Platts reserves the rights to change specification parameters at short notice. Platts welcomes feedback and suggestions on any aspects of specifications and assessments to [elza\\_turner@platts.com](mailto:elza_turner@platts.com), [simon\\_thorne@platts.com](mailto:simon_thorne@platts.com) and [jorge\\_montepeque@platts.com](mailto:jorge_montepeque@platts.com).

### PRICE UNITS

All the primary bulk product prices in Russia are in Roubles per metric tonne (mt). The minimum fluctuation in price is Rb5/mt for crude oil and all products. All bids and offers must be made incrementally and each increment must not exceed Rb 25/mt. However, the daily assessment has no minimum or maximum daily fluctuation as compared with the previous day assessment.

### TIME OF ASSESSMENT

Platts Russian domestic crude and products assessments reflect the transactable value prevailing at 16.30:00 Moscow time (13:30:00 London time). The assessment methodology reflects values on a market-on-close basis. Trading activity, including bids/offers and transactions, is covered during the typical operating hours of the Russian markets with market values determined precisely at 16.30:00 Moscow time.

Platts tracks outright and spread levels through the day and these levels may have a bearing on final assessment levels, depending on transparency and the patterns of liquidity over the day.

All market activity is viewed in light of its market relevance, repeatability and transparency. Transactions between related

parties or transactions that do not meet Platts high standards for transparency, verifiability and repeatability may not be taken into account.

### BIDS/OFFERS

Platts considers transactions, bid/offer levels and market indications that are reflective of typical conditions and originating from sources deemed reliable.

Details of bids/offers and deals for European oil products are provided on Platts electronic screen service Platts Global Alert on PGA003 (crude oil: yahoo ID [plattsruscrude](mailto:plattsruscrude) or +44 (0)20 7176 6176) and PGA005 (oil products: yahoo ID [plattsrusproducts](mailto:plattsrusproducts) or +44 (0)20 7176 6104).

Bids and offers must in principle be open to any reputable and creditworthy counterparty.

Platts will exclude transactions, bids/offers or any market indications when these appear to be unrepresentative of the market, or unrepeatable. Deals done below the level of prevailing bids or above the level of prevailing offers (i.e., selling through the bid or buying through the offer) will not be reflected in Platts assessments.

### EXECUTABILITY

Platts only takes into account bids and offers where trading participants have demonstrated that those bids and offers are firm and executable. For the purposes of its assessments, Platts considers in its assessment process bids and offers that have been communicated to reporters/price specialists before 15.45:00 Moscow time (12:45:00 London time).

Platts considers in its assessment incremental price changes made to applicable bids or offers up to but no later than 16.15:00 Moscow time (13.15:00 London time), after which only deals will be considered. Platts may change the parameters of these time cut-offs as markets evolve.

Platts takes into account bids/offers that are executable under normal circumstances. Where provisions in the bid or offer make it difficult or impossible to execute, the bid or offer will not be considered in the assessment.

### PERFORMANCE

Platts considers only those transactions, bids or offers where market participants perform under typical contractual terms.

Platts accepts that individual companies may have trading limits with counterparties and other factors, including legal issues

between companies, may prevent companies from trading with each other. Such counterparty issues will be dealt with on a case-by-case basis.

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

### INCREMENTABILITY

Price changes to bids and offers are considered in the assessment process where the improvements in the price of bids and offers are incremental in nature. Typically the increments considered would be of a maximum of Rb25/mt but Platts may vary these parameters depending on market conditions. Price changes made very rapidly, that do not allow a counterparty to execute, will be disregarded.

Please note that market participants may withdraw bids/offers at any point, provided no counterparty has expressed an intention to execute the bid/offer. Also market participants may back away from the price non-incrementally.

### REPEATABILITY

Bids, offers and transactions are viewed against the broader supply/demand generated by those bids/offers and transactions. Hence if a low price offer generates too much demand, Platts may determine in its editorial process that the market value is higher than the level offered. Likewise if a high bid generates too much supply and the buyer is unable to buy all the volume that is offered, Platts in its editorial process may determine that the market value is lower than the level bid.

### SPREADS

Platts typically reflects fixed price deals, bids and offers in its assessments. Platts also uses bids/offers and transactions on a floating price basis. Platts may use additional indications as appropriate including the market value of spread relationships with other oil grades. In certain illiquid markets, it may establish values based on freight differentials to more liquid benchmarks.

### TIMING

Assessments reflect FIP (free in pipe) deliveries on crude oil and FCA (freight carrier alongside) deliveries on oil products. Crude oil assessments typically reflect deliveries for the month following publication. In November, for instance, Platts will assess crude delivered in December. The export scheduling typically finalizes by the 25th of the month prior to delivery but

trading of domestic barrels may continue up to around the 5th of the month of delivery. Platts' assessments will reflect volumes trading for delivery the month following publication. For example, the crude oil Urals assessments for December would be published up to November 30th or closest prior working day. Trading activity during the month of loading will be reported as per normal in Platts publications but will not be considered in the assessment process.

Oil products assessments reflect deliveries 5-25 days ahead, normalized to the mid-point of this range.

### PAYMENT TERMS

Payment typically is as per standard commercial practice within Russia which is pre-payment, i.e. before the delivery/shipment takes place. Where different terms are given this will be allowed for in the assessment process..

### EMBEDDED OPTIONS

Platts overall objective is to reflect the transactable value of the commodity assessed. In cases where the apparent value of the commodity includes extra optionalities and the intrinsic value of the commodity is masked, Platts may use its editorial judgement to factor out such extraneous elements from the value of the commodity, or it may decide not to use the bid, offer or transaction in its assessment process.

Optionalities that typically mask the value of the commodity include loading or delivery options held by the buyer or seller, volume option tolerances exercisable by the buyer or seller or quality specifications among others.

### LOADING/DELIVERY LOCATION

The key price formation centers in Platts' Russian domestic crude assessments are Moscow and Surgut, while in its products coverage assessments are made basis Ufa and Moscow.

### PARCEL SIZE

Platts seeks to reflect bids/offers and transactions typical of each of the markets it reflects. Because trading patterns vary over time, Platts defines the typical parcel sizes reflected under the individual assessments, but these may vary according to market conditions. Where a range of cargo sizes is considered, Platts will reflect typical cargo sizes prevailing in the market at the time of the assessment.

## RUSSIAN DOMESTIC MARKET ASSESSMENTS

Quote	Daily Prices		Monthly Averages			Assessment PGA Pages	Commentary PGA Pages
	Low	High	Low	High	Mean		
Crude oil							
Urals FIP Surgut	AAUDH00-AAUDH00		AAUDH03-AAUDH03		AAUDH03	<PGA1405>	<PGA1406>
Urals Moscow	AAUDJ00-AAUDJ00		AAUDJ03-AAUDJ03		AAUDJ03	<PGA1405>	<PGA1406>
--FIP Price--							
Nizhneartovsk	AAUNJ00-AAUNJ00		AAUNJ03-AAUNJ03		AAUNJ03	<PGA1405>	<PGA1406>
Samara	AAUNIO0-AAUNIO0		AAUNIO3-AAUNIO3		AAUNIO3	<PGA1405>	<PGA1406>
Volgograd	AAUNK00-AAUNK00		AAUNK03-AAUNK03		AAUNK03	<PGA1405>	<PGA1406>
Novorossiysk	AAUNL00-AAUNL00		AAUNL03-AAUNL03		AAUNL03	<PGA1405>	<PGA1406>
Nizhniy Nov	AAUNM00-AAUNM00		AAUNM03-AAUNM03		AAUNM03	<PGA1405>	<PGA1406>
Ryazan	AAUNN00-AAUNN00		AAUNN03-AAUNN03		AAUNN03	<PGA1405>	<PGA1406>
Urals FIP Ufa	AAUDG00-AAUDG00		AAUDG03-AAUDG03		AAUDG03	<PGA1405>	<PGA1406>
Yaroslavl	AAUNO00-AAUNO00		AAUNO03-AAUNO03		AAUNO03	<PGA1405>	<PGA1406>
Primorsk	AAUNP00-AAUNP00		AAUNP03-AAUNP03		AAUNP03	<PGA1405>	<PGA1406>
Gasoline							
FCA Privolzhsky Federal District/Basis Ufa							
Prem Unl	AAUDL00-AAUDL00		AAUDL03-AAUDL03		AAUDL03	<PGA1410>	<PGA1411>
Reg Unl	AAUDM00-AAUDM00		AAUDM03-AAUDM03		AAUDM03	<PGA1410>	<PGA1411>
Norm Unl	AAUDN00-AAUDN00		AAUDN03-AAUDN03		AAUDN03	<PGA1410>	<PGA1411>
FCA Central Federal District/Basis Moscow							
Prem Unl	AAUDQ00-AAUDQ00		AAUDQ03-AAUDQ03		AAUDQ03	<PGA1410>	<PGA1411>
Reg Unl	AAUDR00-AAUDR00		AAUDR03-AAUDR03		AAUDR03	<PGA1410>	<PGA1411>
Norm Unl	AAUDS00-AAUDS00		AAUDS03-AAUDS03		AAUDS03	<PGA1410>	<PGA1411>
Diesel							
FCA Privolzhsky Federal District/Basis Ufa							
Diesel 0.05	AAUD000-AAUD000		AAUD003-AAUD003		AAUD003	<PGA1413>	<PGA1411>
FCA Central Federal District/Basis Moscow							
Diesel 0.05	AAUDT00-AAUDT00		AAUDT03-AAUDT03		AAUDT03	<PGA1413>	<PGA1411>
Fuel oil							
FCA Privolzhsky Federal District/Basis Ufa							
Low Sulfur Fuel Oil	AAUDP00-AAUDP00		AAUDP03-AAUDP03		AAUDP03	<PGA1416>	<PGA1417>
Fuel oil 3.5% M-100	AAUNU00-AAUNU00		AAUNU03-AAUNU03		AAUNU03	<PGA1416>	<PGA1417>
FCA Central Federal District/Basis Moscow							
Low Sulfur Fuel Oil	AAUDU00-AAUDU00		AAUDU03-AAUDU03		AAUDU03	<PGA1416>	<PGA1417>
Fuel oil 3.5% M-100	AAUNV00-AAUNV00		AAUNV03-AAUNV03		AAUNV03	<PGA1416>	<PGA1417>

**FREIGHT DIFFERENTIALS**

Platts may take into account prevailing freight rate levels in establishing relative values. Where a market has become illiquid, Platts may routinely determine FIP or FCA values from those prevailing in nearby markets.

**SEASONALITY**

The switch in diesel qualities from summer to winter grade and vice versa may have a significant impact on diesel prices in Russia.

Platts generally announces a phase-in period for the summer and winter grades, in which the incoming seasonal grade is given an increasing weighting in the assessment on a pro-rata basis.

**DATA CODES**

Each Platts assessment is identified in the electronic databases by a 7-character data code. These are listed in the table on page 4 of this document.

**CRUDE OIL**

**URALS FIP UFA**

**Quality:** Urals (GOST R 51858 - 2002). API gravity is approximately 31-33 degrees (specific density at 15°C is 0.8545 - 0.8744 g/cm<sup>3</sup>) normalized to 32 degrees (0.8654 g/cm<sup>3</sup>). The sulfur content reflects normal pipeline quality typically 1.3%. Maximum paraffin content is 6%. Maximum water content is 0.5%. Maximum salt content is 300 mg/dm<sup>3</sup>.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Ufa.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** N/A

**Database details:**

Dispatch Category	RA
12 Char. Symbol	AAUDG0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDG00

Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Ufa Rb/Mt

**URALS FIP SURGUT**

**Quality:** Urals (GOST R 51858 - 2002). API gravity is approximately 31-33 degrees (specific density at 15°C is 0.8545 - 0.8744 g/cm<sup>3</sup>) normalized to 32 degrees (0.8654 g/cm<sup>3</sup>). The sulfur content reflects normal pipeline quality typically 1.3%. Maximum paraffin content is 6%. Maximum water content is 0.5%. Maximum salt content is 300 mg/dm<sup>3</sup>.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Surgut.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** N/A

**Database details:**

Dispatch Category	RA
12 Char. Symbol	AAUDH0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDH00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Surgut Rb/Mt

**URALS FIP MOSCOW**

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Moscow.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

**Database details:**

Dispatch Category	RA
12 Char. Symbol	AAUDJ0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDJ00

Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Moscow Rb/Mt

Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Nizhnevartovsk Rb/Mt

### URALS FIP SAMARA

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Samara.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNI0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNI00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Samara Rb/Mt

### URALS FIP NIZNEVARTOVSK

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Nizhnevartovsk.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNJ0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNJ00
Earliest Date	26-JUN-2006

### URALS FIP VOLGOGRAD

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Volgograd.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNK0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNK00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Volgograd Rb/Mt

### URALS FIP NOVOROSSIISK

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Novorossiisk.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNL0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNL00
Earliest	Date 26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR

Description Urals FIP Novorossiysk Rb/Mt

### URALS FIP YAROSLAVL

#### URALS FIP NIZHNIY NOVGOROD

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Nizhnii Novgorod.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNM0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNM00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Nizhniy Nov Rb/Mt

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Yaroslavl.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUN00000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUN000
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Yaroslavl Rb/Mt

#### URALS FIP RYAZAN

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Ryazan.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNN0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNN00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Ryazan Rb/Mt

#### URALS FIP PRIMORSK

**Quality:** Normal Urals pipeline quality as specified for Ufa and Surgut above.

**Size:** Parcels of 5,000 mt and over are used for the assessment.

**Location:** Basis is FIP (free in pipeline) Primorsk.

**Timing:** Typically export scheduling is finished by the 25th of the month prior to the traded month and domestic trading may continue approximately until the 5th of the traded month. Platts assessments reflect volumes trading for delivery the month following publication.

**Other:** Platts currently reflects values based on pipeline differentials from Surgut to the delivery location.

#### Database details:

Dispatch Category	RA
12 Char. Symbol	AAUNP0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNP00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FTP KR PL12 RTR SAR TLR
Description	Urals FIP Primorsk Rb/Mt

## GASOLINE

### PREMIUM UNL FCA BASIS UFA

**Quality:** RON is 95 and the MON is 85. Specific density at 15°C is 0.725 - 0.780 g/cm<sup>3</sup>. Maximum lead content is 0.01% g/dm<sup>3</sup>. Maximum sulphur content is 0.05%.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Privolzhsky Federal District. The assessment basis is FCA Ufa. Material from other origins in the Privolzhsky Federal District is normalized to Ufa basis on an incremental freight differential.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDL0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDL00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Prem Unl FCA PFD Rb/Mt

### PREMIUM UNL FCA BASIS MOSCOW

**Quality:** RON is 95 and the MON is 85. Specific density at 15°C is 0.725 - 0.780 g/cm<sup>3</sup>. Maximum lead content is 0.01% g/dm<sup>3</sup>. Maximum sulphur content is 0.05%.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Central Federal District. The assessment basis is FCA Moscow. The assessment reflects spot activity in the Central Federal District, with the value normalized to Moscow basis.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDQ0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDQ00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR

Description Prem Unl FCA CFD Rb/Mt

### REGULAR UNL FCA BASIS UFA

**Quality:** RON is 92 and the MON is 83. Specific density at 15°C is 0.725 - 0.780 g/cm<sup>3</sup>. Maximum lead content is 0.01% g/dm<sup>3</sup>. Maximum sulphur content is 0.05%.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Privolzhsky Federal District. The assessment basis is FCA Ufa. Material from other origins in the Privolzhsky Federal District is normalized to Ufa basis on an incremental freight differential.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDM0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDM00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Reg Unl FCA PFD Rb/Mt

### REGULAR UNL FCA BASIS MOSCOW

**Quality:** RON is 92 and the MON is 83. Specific density at 15°C is 0.725 - 0.780 g/cm<sup>3</sup>. Maximum lead content is 0.01% g/dm<sup>3</sup>. Maximum sulphur content is 0.05%.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Central Federal District. The assessment basis is FCA Moscow. The assessment reflects spot activity in the Central Federal District, with the value normalized to Moscow basis.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDR0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDR00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Reg Unl FCA CFD Rb/Mt

### NORMAL UNL FCA BASIS UFA

**Quality:** RON is 80 and the MON is 76. Specific density at 15°C is 0.700 - 0.750 g/cm<sup>3</sup>. Maximum lead content is 0.01% g/dm<sup>3</sup>. Maximum sulphur content is 0.05%. The assessment will also consider A - 76 grade GOST 2084 - 77 as it has similar specifications.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt

**Location:** Reflects material sold FCA in the Privolzhsky Federal District. The assessment basis is FCA Ufa. Material from other origins in the Privolzhsky Federal District is normalized to Ufa basis on an incremental freight differential.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

#### Database Details:

Dispatch Category	RM
12 Char. Symbol	AAUDN0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDNOO
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Norm Unl FCA PFD Rb/Mt

### NORMAL UNL FCA BASIS MOSCOW

**Quality:** RON is 92 and the MON is 83. Specific density at 15°C is 0.725 - 0.780 g/cm<sup>3</sup>. Maximum lead content is 0.01% g/dm<sup>3</sup>. Maximum sulphur content is 0.05%.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Central Federal District. The assessment basis is FCA Moscow. The assessment reflects spot activity in the Central Federal District, with the value normalized to Moscow basis.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

#### Database Details:

Dispatch Category	RM
12 Char. Symbol	AAUDS0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDS00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Norm Unl FCA CFD Rb/Mt

## DIESEL

### DIESEL 0.05% BASIS UFA

**Quality:** Summer - 0.05% - 62: Maximum sulphur content is 0.05%. Minimum flash point is 62°C. Specific density at 20°C is 0.860 g/cm<sup>3</sup>. Minimum cetane number is 45.

Winter - 0.05% -35: Maximum sulphur content is 0.05%. Maximum pour point is -35°C. Specific density at 20°C is 0.840 g/cm<sup>3</sup>. Minimum cetane number is 45.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Privolzhsky Federal District. The assessment basis is FCA Ufa. Material from other origins in the Privolzhsky Federal District is normalized to Ufa basis on an incremental freight differential.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

#### Database Details:

Dispatch Category	RM
12 Char. Symbol	AAUD000000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUD000
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Diesel 0.05 FCA PFD Rb/Mt

### DIESEL 0.05% BASIS MOSCOW

**Quality:** Summer - 0.05% - 62: Maximum sulphur content is 0.05%. Minimum flash point is 62°C. Specific density at 20°C is 0.860 g/cm<sup>3</sup>. Minimum cetane number is 45.

Winter - 0.05% -35: Maximum sulphur content is 0.05%. Maximum pour point is -35°C. Specific density at 20°C is 0.840 g/cm<sup>3</sup>. Minimum cetane number is 45.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Central Federal District. The assessment basis is FCA Moscow. The assessment reflects spot activity in the Central Federal District, with the value normalized to Moscow basis.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDT0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDT00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	Diesel 0.05 FCA CFD Rb/Mt

**FUEL OIL****LSFO FCA BASIS UFA**

**Quality:** Maximum sulphur content is 1.5%. Maximum specific gravity is 0.991 g/ml. Maximum viscosity at 100°C is 50 cSt (6.8 Engler). Minimum flash point is 65°C. Maximum water content is 1%. Maximum pour point is 42°C. Maximum ash content is 0.14%. Minimum NCV kJ/kg is 40,530.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Privolzhsky Federal District. The assessment basis is FCA Ufa. Material from other origins in the Privolzhsky Federal District is normalized to Ufa basis on an incremental freight differential.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDP0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDP00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	LSFO FCA PFD Rb/Mt

**LSFO FCA BASIS MOSCOW**

**Quality:** Maximum sulphur content is 1.5%. Maximum specific gravity is 0.991 g/ml. Maximum viscosity at 100°C is 50 cSt (6.8 Engler). Minimum flash point is 65°C. Maximum water content is 1%. Maximum pour point is 42°C. Maximum ash content is 0.14%. Minimum NCV kJ/kg is 40,530.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Central Federal District. The assessment basis is FCA Moscow. The assessment

reflects spot activity in the Central Federal District, with the value normalized to Moscow basis.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUDU0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUDU00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	LSFO FCA CFD Rb/Mt

**M-100 FCA BASIS UFA**

**Quality:** Maximum sulphur content is 3.5%. Maximum specific gravity is 0.991 g/ml. Maximum viscosity at 100°C is 50 cSt (6.8 Engler). Minimum flash point is 65°C. Maximum water content is 1%. Maximum pour point is 42°C. Maximum ash content is 0.14%. Minimum NCV kJ/kg is 39,900.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Privolzhsky Federal District. The assessment basis is FCA Ufa. Material from other origins in the Privolzhsky Federal District is normalized to Ufa basis on an incremental freight differential.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUNU0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNU00
Earliest Date	26-JUN-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	3.5% FO M-100 FCA PFD Rb/Mt

**M-100 FCA BASIS MOSCOW**

**Quality:** Maximum sulphur content is 3.5%. Maximum specific gravity is 0.991 g/ml. Maximum viscosity at 100°C is 50 cSt (6.8 Engler). Minimum flash point is 65°C. Maximum water content is 1%. Maximum pour point is 42°C. Maximum ash content is 0.14%. Minimum NCV kJ/kg is 39,900.

**Size:** Parcels of 1,000-5,000 mt each normalized to 1,000 mt.

**Location:** Reflects material sold FCA in the Central Federal District. The assessment basis is FCA Moscow. The assessment reflects spot activity in the Central Federal District, with the value normalized to Moscow basis.

**Timing:** Reflects deliveries 5-25 days ahead, normalized to the mid-point of this range.

**Other:** N/A

**Database Details:**

Dispatch Category	RM
12 Char. Symbol	AAUNV0000000
9 Char. Symbol(s)	.
7 Char. Symbol	AAUNV00
Earliest Date	26-JUN-2006
Latest Date	10-AUG-2006
Vendors	BLM CQI DRI EMS FUT KR PL12 RTR SAR TLR
Description	3.5% FO M-100 FCA CFD Rb/Mt

## APPENDIX I – CRUDE

**Table 1 – Requirements and test methods for crude oil**

Property	Units	Limits	
		Min	Max
Density at 20°C	g/cm <sup>3</sup> , max		0.895
Sulphur content	%, max		1.8
Paraffin content	%, max		6.0
Salt content	mg/dm <sup>3</sup>		300
Water and sediments	%, max		1.2
Fractional yield	%, min		
up to 200°C			21
up to 300°C			41
up to 350°C			50

## APPENDIX II – GASOLINE

**Table 1 – Requirements and test methods for premium grade unleaded gasoline**

Property	Units	Limits	
		Min	Max
Research octane number, RON		95	-
Motor octane number, MON		85	-
Lead content	g/dm <sup>3</sup>	-	0.01
Density (at 15°C)	kg/m <sup>3</sup>	725	780
Sulfur content	%	-	0.05
Oxidation stability	minutes	360	-
Existent gum content	mg/100ml	-	5
Appearance		clear and bright	
Benzene content	%	-	5
Copper strip corrosion	rating	class 1	

**Table 2 – Requirements and test methods for regular grade unleaded gasoline**

Property	Units	Limits	
		Min	Max
Research octane number, RON		92	-
Motor octane number, MON		83	-
Lead content	g/dm <sup>3</sup>	-	0.01
Density (at 15°C)	kg/m <sup>3</sup>	725	780
Sulfur content	%	-	0.05
Oxidation stability	minutes	360	-
Existent gum content	mg/100 ml	-	5
Appearance		clear and bright	
Benzene content	%	-	
Copper strip corrosion	rating	class 1	

**Table 3 – Requirements and test methods for normal grade unleaded gasoline**

Property	Units	Limits	
		Min	Max
Research octane number, RON		80	-
Motor octane number, MON		76	-
Lead content	g/dm <sup>3</sup>	-	0.01
Density (at 15°C)	kg/m <sup>3</sup>	700	750
Sulfur content	%	-	0.05
Oxidation stability	minutes	360	-
Existent gum content	mg/100 ml	-	5
Appearance		clear and bright	
Benzene content	%	-	5
Copper strip corrosion	rating	class 1	

**Table 4 – Volatility classes**

Property	Units	Class				
		1	2	3	4	5
Vapour pressure	kPa, min	35	45	55	60	80
	kPa, max	70	80	90	95	100
% evaporated at 70°C	%, min	10	15	15	15	15
	%, max	45	45	47	50	50
% evaporated at 100°C	%, min	35	40	40	40	40
	%, max	65	70	70	70	70
% evaporated at 180°C	%, min	85	85	85	85	85
Final Boiling Point FBP	°C, max	215	215	215	215	215
Distillation residue	%, max	2	2	2	2	2
Evaporation index, max		900	1000	1100	1200	1300
Overpoint	°C, min	35	35	nil	nil	nil
Distillation limit 10%	°C, max	75	70	65	60	55
Distillation limit 50%	°C, max	120	115	110	105	100
Distillation limit 90%	°C, max	190	185	180	170	160

## APPENDIX III – DIESEL

### Requirements and test methods for diesel

Property	Limits	
	Summer (L)	Winter (Z)
1. Cetane number, min	45	45
2. Distillation:		
50% recovered at, C, max	280	280
96% recovered at, C, max	360	340
3. Kinematic viscosity at 20°C, mm <sup>2</sup> /s (cSt)	3.0 - 6.0	1.8 - 5.0
4. Pour point, C, max, for climatic zone:		
- temperate zone	-10	-35
- cold zone	-	-45
5. Cloud point, C, max, for climatic zones:		
- temperate zone	-5	-25
- cold zone	-	-35
6. Flash point (closed cup), C, min:		
-for locomotive and vessel diesel engines and gas turbines	62	40
-for general purpose diesel engines	40	35
7. Sulfur content, %, max	0.05	0.05
8. Sour sulfur, %, max	0.0008	0.0068
9. Hydrogen sulphide	nil	nil
10. Copper strip test	passes	passes
11. Water soluble acids, alkali	nil	nil
12. Gum, mg/100cm <sup>3</sup> , max	25	25
13. Acidity, mg KOH/100 cm <sup>3</sup> , max	5	5
14. Iodine number, g/100 g of gasoil, max	5	5
15. Ash content, %, max	0.008	0.008
16. Coking ability of 10% residue, %, max	0.2	0.1
17. Filtration factor, max	2	2
18. Sediments	nil	nil
19. Water	nil	nil
20. Density at 20°C, kg/m <sup>3</sup> , max	860	840
21. CFPP, C, max	-5	-

## APPENDIX IV – FUEL OIL

### Requirements and test methods for high sulphur and low sulphur fuel oil grades

Property	Limits	
	M-100	LSFO
Specific density g/ml	0.991	0.991
Maximum viscosity @ 80c Engler	16	16
Minimum flash point °C	65	65
Maximum pour point °C	42	42
Maximum ash %	0.14	0.14
Maximum water % v/v	1	1
Maximum sulphur %	3.5	1.5
Minimum NCV kcal/kg	9600	9700
Maximum asphaltines %	8	6
Minimum NCV kJ/kg	39,900	40,530