ARGUS AGRIMARKETS

Contents:
Methodology overview 2
Market information and price types 5
Ukraine 5
Romania/Bulgaria 9
Turkey 9
Northwest Europe 9
France 10
Baltic 10
Russia 11
China 11
Argentina 12
Brazil 12
Canada 13
Southeast Asia 13
Rapeseed oil (RSO) 13
Freight 13
**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 agricultural products 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 judgement 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 judgement 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 judgement 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 judgement 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 ocean-going 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 judgement.

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 judgement in the price assessment process.

Transparency
Argus values transparency in 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
Argus agricultural product prices are published in the Argus AgriMarkets 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

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. 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 judgement 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 judgement
- 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 judgement for illiquid markets
- Editors are required to sign-off on all price assessments each day, thus ensuring the consistent application of judgement.

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
Ukraine

Argus Ukraine wheat

fob Ukraine (POC)
Classes: 11.5pc protein, 12.5pc protein and feed grade
Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment
Loading period: 15-45 days forward of the date of assessment
Cargo size: standardised to 25,000-50,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: ports around Odessa (POC). Information about trade at other regional ports may be considered for inclusion in the assessment if deemed relevant to the price around Odessa.
Currency/unit: $/t

Harvest years
Prices are published for each year’s harvest from 15 May until 15 June of the following year. Accordingly, from 15 May until 15 June each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 15 May.

cpt Ukraine (POC)
Classes: 11.5pc protein, 12.5pc protein and feed grade
Timing: market information received after 3pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 30 days forward of the date of assessment
Cargo size: standardised to 1,000-10,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: ports around Odessa (POC). Information about trade at other regional ports may be considered for inclusion in the assessment if deemed relevant to the price around Odessa.
Currency/unit: $/t

Harvest years
Prices are published for each year’s harvest from 1 June until 30 June of the following year. Accordingly, from 1-30 June each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 1 June.

Market information and price types
Argus surveys a wide cross section of market participants via telephone, e-mail, instant messenger and other means of communication and collects bids, offers, trades and other market information.

Prices are published as the range of the best, or highest, bid and the best, or lowest, offer. A midpoint of the bid-offer range is also published.
Wheat classes
Prices are published for three classes of wheat.

<table>
<thead>
<tr>
<th>Wheat specifications</th>
<th>11.5pc protein</th>
<th>12.5pc protein</th>
<th>Feed grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Milling</td>
<td>Milling</td>
<td>Feed grade</td>
</tr>
<tr>
<td>Protein (pc)</td>
<td>min 11.5</td>
<td>min 12.5</td>
<td>min 720</td>
</tr>
<tr>
<td>Test weight (g/l)</td>
<td>min 760</td>
<td>min 770</td>
<td>min 720</td>
</tr>
<tr>
<td>Moisture (pc)</td>
<td>max 14</td>
<td>max 14</td>
<td>max 14</td>
</tr>
<tr>
<td>Bug damage (pc)</td>
<td>max 1.5</td>
<td>max 1.5</td>
<td>max 4</td>
</tr>
<tr>
<td>Foreign matter (pc)</td>
<td>max 2</td>
<td>max 2</td>
<td>max 2</td>
</tr>
<tr>
<td>Falling number (seconds)</td>
<td>min 230</td>
<td>min 250</td>
<td></td>
</tr>
</tbody>
</table>

Argus Ukraine corn

fob Ukraine (POC)
Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment
Loading period: 15-45 days forward of the date of assessment
Cargo size: standardised to 25,000-50,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: ports around Odessa (POC). Information about trade at other regional ports may be considered for inclusion in the assessment if deemed relevant to the price around Odessa.

Harvest years
Prices are published for each year’s harvest from 15 August until 15 September of the following year. Accordingly, from 15 August until 15 September each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 15 August.

cpt Ukraine (POC)
Timing: market information received after 3pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 30 days forward of the date of assessment
Cargo size: standardised to 1,000-10,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: ports around Odessa (POC). Information about trade at other regional ports may be considered for inclusion in the assessment if deemed relevant to the price around Odessa.

Harvest years
Prices are published for each year’s harvest from 1 September until 30 September of the following year. Accordingly, from 1-30 September each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.
Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 1 September.

dap Constanta
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Currency/unit: $/t, €/t

dap Izov
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t

fob Reni/Izmail
Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment
Loading period: 7-37 days forward of the date of assessment
Cargo size: standardised to 3,000-7,000t aboard a coaster vessel. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: Reni and Izmail ports on the Danube in Ukraine. Information about trade at other regional Danube river ports may be considered for inclusion in the assessment if deemed relevant to the price in Reni or Izmail.
Currency/unit: $/t

cpt Reni/Izmail
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 15 days forward of the date of assessment
Cargo size: standardised to 200-500t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: Reni and Izmail ports on the Danube in Ukraine. Information about trade at other regional Danube river ports may be considered for inclusion in the assessment if deemed relevant to the price at Reni or Izmail.
Currency/unit: $/t

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 1 September.

dap Constanta
Timing: market information received after 3pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t, €/t

dap Izov
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 1 September.

dap Constanta
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 1 September.

dap Constanta
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t

Corn specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Unit</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture (pc)</td>
<td>%</td>
<td>max 14.5</td>
</tr>
<tr>
<td>Foreign matter (pc)</td>
<td>%</td>
<td>max 2</td>
</tr>
<tr>
<td>Broken kernels (pc)</td>
<td>%</td>
<td>max 5</td>
</tr>
<tr>
<td>Damaged kernels (pc)</td>
<td>%</td>
<td>max 5</td>
</tr>
</tbody>
</table>

Argus Ukraine feed barley

cpt Ukraine (POC)
Timing: market information received after 3pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 30 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
To China: prices for Ukrainian feed barley bound for China, which requires a specific phytosanitary protocol, are published as a differential bid, offer and midpoint to barley without a specified destination and as outright prices.
Location: ports around Odessa (POC). Information about trade at other regional ports may be considered for inclusion in the assessment if deemed relevant to the price around Odessa.

Harvest years
Prices are published for each year’s harvest from 1 June until 30 June of the following year. Accordingly, from 1-30 June each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 1 June.

dap Constanta
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t, €/t

dap Izov
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t
fob Reni/Izmail
Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment
Loading period: 7-37 days forward of the date of assessment
Cargo size: standardised to 3,000-7,000t aboard a coaster vessel. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: Reni and Izmail ports on the Danube in Ukraine. Information about trade at other regional Danube river ports may be considered for inclusion in the assessment if deemed relevant to the price in Reni or Izmail.
Currency/unit: $/t

cpt Reni/Izmail
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 15 days forward of the date of assessment
Cargo size: standardised to 200-500t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: Reni and Izmail ports on the Danube in Ukraine. Information about trade at other regional Danube river ports may be considered for inclusion in the assessment if deemed relevant to the price in Reni or Izmail.
Currency/unit: $/t

Argus Ukraine rapeseed

dap Constanta
Specifications: non-GMO rapeseed, accompanied by RED-compliant sustainability certification issued by a European Commission-authorised body
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Currency/unit: $/t, €/t

dap Izov
Specifications: non-GMO rapeseed, accompanied by RED-compliant sustainability certification issued by a European Commission-authorised body
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 500-5,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: the Izov crossing on the Ukraine-Poland border. Information about deliveries to other points along the Ukrainian border may be considered for inclusion in the assessment if deemed relevant to the price at Izov.
Currency/unit: $/t

cpt Reni/Izmail
Specifications: non-GMO rapeseed, accompanied by RED-compliant sustainability certification issued by a European Commission-authorised body
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 15 days forward of the date of assessment
Cargo size: standardised to 200-500t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Location: Reni and Izmail ports on the Danube in Ukraine. Information about trade at other regional Danube river ports may be considered for inclusion in the assessment if deemed relevant to the price in Reni or Izmail.
Currency/unit: $/t

Argus Ukraine sunflower seeds (SFS)
dap Constanta
Timing: market information received after 5pm Kyiv time may not be considered for inclusion in the assessment
Delivery period: 45 days forward of the date of assessment
Cargo size: standardised to 100-1,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.
Currency/unit: $/t

Sunflower seed specifications
Sunflower seeds suitable for oil extraction, of good merchantable quality. Radioactivity, pesticide residues, aflatoxins, and heavy metals according to EU terms and regulations
Oil content (tale quale seed) (pc) basis 44, min 42
Moisture (pc) basis 8, max 10
Foreign admixture (pc) basis 2, max 4
FFA (free fatty acids) (pc) basis 1, max 3

Rapeseed specifications
Conventional rapeseed of double zero variety, of sound, fair and merchantable quality
Oil content (pc) basis 40
Moisture (pc) basis 9, max 10
Impurities (pc) basis 2, max 3pc
Oleic acidity (pc) max 2pc
Eruic acid max 2pc
Glucosinolates (micromoles) max 25
**Forward prices**
Argus assesses physical forward prices for wheat, corn and barley (including China-bound barley) delivered to and loading from Ukraine.

**Wheat and corn**
For each market, prices are assessed for three forward months and for months at the start of the new harvest each year — July, August and September for wheat and October and November for corn. The new harvest prices will duplicate the published forward months for part of the year, and are not published once the September wheat and November corn contracts have expired.

**Barley**
For each market, prices are assessed for two forward months and for two months at the start of the new harvest each year — July and August. The new harvest prices will duplicate the published forward months for part of the year, and are not published once the August barley contracts have expired.

**Schedule**
Fob price assessments roll on the first day of the month two months before loading. For example, the April contract will last be assessed as a forward month on 28 of February.

Cpt price assessments roll on the 16th day of the month before delivery, except for February, when assessments roll on the 15th day of the month before delivery.

**Romania/Bulgaria**
Romania/Bulgaria prices are for loadings from the ports of Constanta, Varna and Burgas (CVB).

Prices are published in $/t. Corn prices are also published in €/t.

**Wheat**

fob CVB
- **Classes**: 11.5pc and 12pc protein milling wheat and feed wheat
- **Timing**: market information received after 5:30pm UK time may not be considered for inclusion in the assessment
- **Loading period**: 15-45 days forward of the date of the assessment
- **Cargo size**: standardised to 25,000-50,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo

**Harvest years**
Prices are published for each year’s harvest from 15 May until 15 June of the following year. Accordingly, from 15 May until 15 June each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

**Corn**

fob CVB
- **Timing**: market information received after 5:30pm UK time may not be considered for inclusion in the assessment
- **Loading period**: 15-45 days forward of the date of the assessment
- **Cargo size**: standardised to 25,000-50,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo

**Harvest years**
Prices are published for each year’s harvest from 15 August until 15 September of the following year. Accordingly, from 15 August until 15 September each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

**Turkey**

**Crude sunflower oil (SFO)**
cif Mersin
- Prices are published weekly in US dollars per tonne ($/t). Prices vary by origin. The range is of the prices of Ukrainian and Russian origin product.
- **Specifications**: free fatty acid content (FFA) basis 1.5%, max 2%; other quality specifications as per FOSFA contract No. 54
- **Timing**: assessed weekly; market information received after 5pm UK time on Tuesday may not be considered for inclusion in the assessment. In the event of a holiday in the UK, prices are assessed on the previous publication day. A publication schedule is available at [www.argusmedia.com](http://www.argusmedia.com)
- **Loading period**: 1-20 days forward of the date of assessment
- **Cargo size**: standardized to 6,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price in Mersin.
- **Location**: Mersin, Turkey. Information about trade at other Turkish ports may be considered for inclusion in the assessment if deemed relevant to the price in Mersin.

**Northwest Europe**

**Crude sunflower oil (SFO)**
fob 6 ports
- **Location**: fob Rotterdam, Amsterdam, Antwerp, Ghent, Dunkirk or Dieppe
- **EU duty free or EU duty paid**
- **Specifications**: quality as per FOSFA contract No. 52
- **Timing**: market information received after 5pm UK time may not be considered for inclusion in the assessment
- **Cargo size**: minimum 500t
- **Spot loading period**: 1-15 days forward of the date of assessment
- **Quarterly prices**: published for two forward quarters. Forward quarters roll on the first working day of the period
Quarters are defined as

- January, February, March (JFM)
- April, May, June (AMJ)
- July, August, September (JAS)
- October, November, December (OND)

Monthly prices: published for the one or two forward months between the date of assessment and the start of the first forward quarter. Monthly prices roll on the first publication day after the 15th of the month before loading except for February, when prices roll on the first publication day after the 14th of the month.

For example, on 1 April, prices are published for May and June and for the July-August-September (JAS) and October-November-December (OND) quarters. On 16 April, prices are published for June and for the July-August-September (JAS) and October-November-December (OND) quarters.

France

Argus will accept market information about outright prices and about differentials to futures markets.

Wheat

fob Rouen

Classes: class A2 milling wheat, minimum 11pc protein content as defined by French grains professional association Intercéréal and published by national agriculture agency FranceAgriMer.

Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment

Loading period: 7-37 days forward of the date of assessment

Location: Rouen

Cargo size: 25,000-50,000t

Currency/unit: €/t, $/t

Harvest years

Prices are published for each harvest from 25 May until 24 June of the following year. Accordingly, from 25 May until 24 June each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

Continuous price series

Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 25 May.

cpt Rouen, cpt La Pallice, cpt Dunkirk

Classes: class A2 milling wheat, minimum 11pc protein content as defined by French grains professional association Intercéréal and published by national agriculture agency FranceAgriMer.

Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment

Delivery period: prices are for delivery during the period described by the first forward Euronext futures contract.

The start and end of the delivery period rolls forward following the Euronext schedule — for example, if the last day of trade in the December Euronext contract is 12 December, the delivery period of the spot price assessment that day is 12-31 December. The next day, 13 December, the delivery period rolls forward to January-March, the period described by the next Euronext contract.

Location: prices are published separately for the ports of Rouen, La Pallice and Dunkirk

Cargo size: 2,000-10,000t

Basis: published as outright July-basis prices and as differentials to the first forward Euronext futures contract. Argus rolls forward the Euronext futures contract used as a differential when the corresponding Euronext options contract expires.

July-basis prices are outright prices from which the cost of storing grain between the start of the marketing year in July and the end of the underlying Euronext contract period. Argus regularly reviews storage costs and will announce any changes should they occur. Prices for Rouen are also published as flat outright prices, which are calculated as the July-basis outright plus storages costs between the start of August and seven days after the date of trade.

Currency/unit: €/t

Baltic Wheat

fob Baltic

Location: fob Riga, Ventspils, Liepaja (Latvia) and Klaipeda (Lithuania)

Classes: feed wheat, 12.5pc and 14pc (see table)

Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment

Loading period: 30-60 days forward of the date of assessment

Cargo size: 25,000-50,000t

Currency/unit: €/t differential; €/t, $/t outright

Harvest years

Prices are published for each year’s harvest from 1 June until 31 May of the following year.

Basis: published as outright prices and as differentials to the first forward Euronext futures contract. Argus rolls forward the Euronext futures contract used as a differential when the corresponding Euronext options contract expires.
Russia

Russia prices are for loadings from Novorossiysk. Information about trade at other regional ports may be considered for inclusion in the assessment if deemed relevant to the price at the listed locations.

Argus Russia wheat

fob Russia
Class: 12.5pc protein
Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment
Loading period: 15-45 days forward of the date of assessment
Cargo size: standardised to 25,000-50,000t. Information about larger or smaller cargoes may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.

Harvest years
Prices are published for each year’s harvest from 15 May until 15 June of the following year. Accordingly, from 15 May until 15 June each year, prices are published separately for two harvests, the current year’s harvest and the previous year’s harvest.

Continuous price series
Argus also publishes a continuous price series that changes from the previous to the current year’s harvest on first publication date on or after 15 May.

Russia wheat specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Milling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein (pc)</td>
<td>min 12.5</td>
</tr>
<tr>
<td>Test weight (g/l)</td>
<td>min 770</td>
</tr>
<tr>
<td>Moisture (pc)</td>
<td>max 14</td>
</tr>
<tr>
<td>Bug damage (pc)</td>
<td>max 1.5</td>
</tr>
<tr>
<td>Foreign matter (pc)</td>
<td>max 2</td>
</tr>
<tr>
<td>Falling number (seconds)</td>
<td>min 250</td>
</tr>
</tbody>
</table>

China

Corn

cfr south China
Prices are published weekly in US dollars per tonne ($/t) as the lowest offer for delivery to the ports of Guangzhou and Shekou in Guangdong province.

The assessment is named “cfr south China” in line with industry convention.

Location: Guangzhou and Shekou
Size: 30,000-60,000t aboard a Panamax vessel or larger
Timing: assessed weekly; market information received after 1pm Beijing time each Friday may not be considered for inclusion in the assessment. In the event of a holiday in China, prices are assessed on the previous publication day. During the weeks of the Chinese New Year and China National Day holidays, no assessments are published. A publication schedule is available at www.argusmedia.com
Delivery period: 1-15 days forward of the date of assessment
Specifications: kernel weight 700-720g/L, kernel moisture 14.5-15pc

Soybeans

cfr China
Prices are assessed and published daily as the range of the best, or highest, bid and the best, or lowest, offered differentials to the latest available Cbot futures settlement for the month named below. A midpoint of the bid-offer range of differentials and outright bid, offer and midpoint prices are also published.

The assessment is of the price of product traded on a cfr basis to ports in north China, extending as far south as Ningbo and Zhoushan. The assessment is named “cfr China” in line with industry convention.
Location: north China, extending as far south as Ningbo and Zhoushan
**Timing:** market information received after 4:30pm Beijing time may not be considered for inclusion in the assessment

**Cargo size:** 60,000t +/- 10pc

**Currency/unit:** US cents/bushel

**Specifications:** soybeans from Brazil meeting the ANEC — Associação Nacional dos Exportadores de Cereais specification during the Latin American export season in February-August, and soybeans from the US meeting the No.2 Yellow specification as defined by the US Federal Grain Inspection Service during the US export season in September-January

**Forward timing:** prices are published for seven loading months forward from the date of assessment

---

**Argentina**

**Wheat**

fob upriver

Grades: milling wheat, Argentina Grade 2 specification or better, minimum 11.5pc protein and minimum 12pc protein

Location: San Lorenzo to Del Guazu

Size: standardised to 20,000-45,000t parcels aboard a Handysize or Kamsarmax vessel. Information about larger or smaller parcels may be considered for inclusion in the assessment if it is deemed relevant to the price of a standard cargo.

Timing: market information received after 5:30pm UK time may not be considered for inclusion in the assessment

Loading period: 15-45 days forward of the date of assessment

---

**Feed Barley**

fob Necochea/Bahia Blanca

Location: Necochea, Bahia Blanca

Size: up to 70,000t parcels aboard a Panamax or Kamsarmax vessel

Timing: market information received after 5.30pm UK time may not be considered for inclusion in the assessment

Loading period: 15-45 days forward of the date of assessment

Specifications: Fair Average Quality (FAQ)

---

**Malting Barley**

fob Necochea/Bahia Blanca

Location: Necochea, Bahia Blanca

Size: up to 30,000t parcels aboard a Handysize vessel

Timing: assessed weekly, market information received after 5.30pm UK time each Friday may not be considered for inclusion in the assessment. In the event of a holiday either in the UK or in Argentina, prices are published on the last working day before the holiday.

Loading period: 15-45 days forward of the date of assessment

Specifications: Fair Average Quality (FAQ)

---

**Soybean oil (SBO)**

Argus AgriMarkets includes spot and forward prices for Argentinian soybean oil (SBO) republished from Argus Americas Biofuels.

Prices are published for prompt delivery and for delivery during the first three months forward.

See the Argus Americas Biofuels methodology.

---

**Brazil**

The price of Brazil-delivered soybean futures and physical corn as differentials to Chicago Board of Trade (Cbot) futures prices.

Prices are published in US cents/bushel as the range between the highest bid and lowest offer during the two hours after the Cbot close of trade.

Specifications are as defined by ANEC – Associação Nacional dos Exportadores de Cereais.

**Soybeans**

Location: fob Paranaguá

Size: minimum 1,000 metric tons/contract

Loading period: prices are assessed and published for up to six monthly contracts and up to two two-month strip contracts. Note, two-month strip contracts are for loading during both of the named months.

Timing: assessments are published daily from 16 September until 15 June. The last assessment for each contract is published in the last Argus AgriMarkets report on or before the 15th of the month before the start of loading.

---

**Soybeans China cfr assessment timing**

<table>
<thead>
<tr>
<th>Month</th>
<th>CBOT</th>
<th>Earliest assessment date</th>
<th>Latest assessment date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>January (F)</td>
<td>16 May</td>
<td>15 December</td>
</tr>
<tr>
<td>February</td>
<td>March (H)</td>
<td>16 June</td>
<td>15 January</td>
</tr>
<tr>
<td>March</td>
<td>March (H)</td>
<td>16 July</td>
<td>15 February</td>
</tr>
<tr>
<td>April</td>
<td>May (K)</td>
<td>16 August</td>
<td>15 March</td>
</tr>
<tr>
<td>May</td>
<td>May (K)</td>
<td>16 September</td>
<td>15 April</td>
</tr>
<tr>
<td>June</td>
<td>July (N)</td>
<td>16 October</td>
<td>15 May</td>
</tr>
<tr>
<td>July</td>
<td>July (N)</td>
<td>16 November</td>
<td>15 June</td>
</tr>
<tr>
<td>August</td>
<td>July (N)</td>
<td>16 December</td>
<td>15 July</td>
</tr>
<tr>
<td>September</td>
<td>November (X)</td>
<td>16 January</td>
<td>15 August</td>
</tr>
<tr>
<td>October</td>
<td>November (X)</td>
<td>16 February</td>
<td>15 September</td>
</tr>
<tr>
<td>November</td>
<td>November (X)</td>
<td>16 March</td>
<td>15 October</td>
</tr>
<tr>
<td>December</td>
<td>January (F)</td>
<td>16 April</td>
<td>15 November</td>
</tr>
</tbody>
</table>
METHODOLOGY AND SPECIFICATIONS GUIDE

November 2023

Soybean assessment timing

<table>
<thead>
<tr>
<th>Month</th>
<th>Cbot</th>
<th>Earliest assessment date</th>
<th>Latest assessment date</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>March (H)</td>
<td>16 September</td>
<td>15 January</td>
</tr>
<tr>
<td>March</td>
<td>March (H)</td>
<td>16 September</td>
<td>15 February</td>
</tr>
<tr>
<td>April</td>
<td>May (K)</td>
<td>16 September</td>
<td>15 March</td>
</tr>
<tr>
<td>April/May</td>
<td>May (K)</td>
<td>16 September</td>
<td>15 March</td>
</tr>
<tr>
<td>May</td>
<td>May (K)</td>
<td>16 September</td>
<td>15 April</td>
</tr>
<tr>
<td>June</td>
<td>July (N)</td>
<td>16 September</td>
<td>15 May</td>
</tr>
<tr>
<td>June/July</td>
<td>July (N)</td>
<td>16 September</td>
<td>15 May</td>
</tr>
<tr>
<td>July</td>
<td>July (N)</td>
<td>16 September</td>
<td>15 June</td>
</tr>
</tbody>
</table>

Corn

Location: fob Santos/Tubarao
Size: minimum 60,000 metric tons
Loading period: prices are assessed and published for up to seven monthly contracts
Timing: assessments are published daily from 16 May until 15 December. The last assessment for each contract is published in the last Argus AgriMarkets report on or before the 15th of the month before the start of loading.

Corn assessment timing

<table>
<thead>
<tr>
<th>Month</th>
<th>Cbot</th>
<th>Earliest assessment date</th>
<th>Latest assessment date</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>July (N)</td>
<td>16 May</td>
<td>15 June</td>
</tr>
<tr>
<td>August</td>
<td>September (U)</td>
<td>16 May</td>
<td>15 July</td>
</tr>
<tr>
<td>September</td>
<td>September (U)</td>
<td>16 May</td>
<td>15 August</td>
</tr>
<tr>
<td>October</td>
<td>December (Z)</td>
<td>16 May</td>
<td>15 September</td>
</tr>
<tr>
<td>November</td>
<td>December (Z)</td>
<td>16 May</td>
<td>15 October</td>
</tr>
<tr>
<td>December</td>
<td>December (Z)</td>
<td>16 May</td>
<td>15 November</td>
</tr>
<tr>
<td>January</td>
<td>March (H)</td>
<td>16 May</td>
<td>15 December</td>
</tr>
</tbody>
</table>

Canada

Wheat

Wheat 13.5pc (CWRS) Canada fob Vancouver
Prices are published in US dollars per tonne ($/t) as the range of the best, or highest, bid and the best, or lowest, offer. A midpoint of the bid-offer range is also published. Argus will accept market information about outright prices and about differentials to other physical or financial markets.

Prices are published as outrights and as differentials to the MGEX spring wheat futures price. The underlying spring wheat futures contract rolls two weeks before the start of the named month.

Location: Vancouver
Cargo size: 50,000-60,000t
Timing: market information received after 5:30pm UK time may not be considered for inclusion in the assessment
Loading period: 30-45 days forward of the date of the assessment
Harvest years: prices are published for each year’s harvest from 1 August until 31 July of the following year
Grade: No.2 Canada Western Red Spring, as defined by the Canadian Grain Commission. Minimum protein content 13.5pc on a 13.5pc moisture basis.

Freight

Grains
- Santos to Qingdao 60,000t
- Kalamaz to Qingdao 65,000t
- Vancouver to Qingdao 65,000t
- Houston to Qingdao 65,000t
- Odessa to Qingdao 65,000t
- Novorossiysk to Qingdao 65,000t
- Odessa to Alexandria 65,000t
- Novorossiysk to Alexandria 65,000t
- Houston to Rotterdam 65,000t

See the Argus Dry Freight methodology.