

European LNG Daily

Methodology for LNG price assessments

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Beta 1.0

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1. Background and mission statement

Council Regulation (EU) 2022/2576 on *enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders* ('the Regulation') tasks the European Union Agency for the Cooperation of Energy Regulators ('ACER') with the publication of daily LNG price assessments. The price assessments shall, by definition, reflect 'the prevailing level at which LNG of stated specification has, or could be expected to have transacted over a defined period of time.'

The Regulation tasks ACER with creating objective daily LNG price assessments by collecting real-time information on LNG transactions. The Regulation grants ACER the necessary powers to collect the data needed for LNG price assessments from LNG market participants, extending the tasks and competences already conferred to ACER under Regulation (EU) No 1227/2011 and Commission Implementing Regulation (EU) No 1348/2014 (collectively referred to as 'REMIT').

ACER's mission is to ensure that objective daily LNG price assessments are made available as of 13 January 2023. ACER must process LNG market participants' data honestly and independently. To that end, ACER's LNG price assessment methodology is designed based on the International Organization of Securities Commissions' (IOSCO) Principles for Price Reporting Agencies established in 2012, whilst ACER's benchmark provision will be designed based on the IOSCO Principles for Financial Benchmarks¹ established in 2013 as a framework of Best Practices. These principles are designed to avoid distortions in the price assessments and to guarantee that results are transparent and accountable. ACER's LNG price assessment methodology therefore aims to produce price assessments that are reliable indicators of LNG market values, free from distortion, and representative of the particular market to which they relate.

This price assessment is to be complemented by the publication of an LNG benchmark by spring 2023.

2. Market Data used in the LNG price assessments

Criteria that define the physical commodity subject to this methodology

The Regulation mandates ACER to collect the LNG market data required to establish the LNG price assessments by means of introducing a new reporting instrument (hereinafter called 'reporting form'). The data collected in the reporting form will be used to create ACER's LNG price assessments. All data reported to ACER will be kept confidential and stored in ACER's secure database.

The data fields contained in the reporting form and referenced throughout this document can be consulted in the document *Guidance on reporting LNG market data* accessible on ACER's

¹ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>

dedicated LNG price assessment webpage². The document offers guidance on all the data points that the reporting form covers, and specifies the characteristics, quality, location, timing, payment terms and minimum volumes accepted, among others. These specifications have been determined in consultation with market participants and follow industry conventions.

ACER will collect information for spot transactions, bids and offers, as well as for transactions concluded under long-term portfolio contracts (see *Guidance on reporting LNG market data* for expanded definitions of contract types). To produce the LNG price assessments, a consideration hierarchy has been established, based on which the reporter's confidence in the data's reliability will be considered first, and the significance of the data will be considered second. As it is further elaborated in the section that follows, transactions rank the highest in the significance hierarchy.

LNG trade data will need to be reported whenever the contract quantity involves specialised vessels with a capacity of at least 75,000 cubic metres of LNG. This threshold guarantees the inclusion of LNG imports via standard-size cargoes (125,000 to 165,000 cubic metres), Q-Flex cargoes (165,000 to 216,000 cubic metres), and Q-Max cargoes (more than 216,000), but excludes small-scale cargoes, which would usually come with different terms of trade than large-scale LNG imports.

Establishing a data hierarchy for the LNG price assessments

To ensure the quality and integrity of the LNG price assessment, ACER will follow a priority order when processing LNG market data:

1. Initially, the daily LNG price assessment will solely take account of **spot transactions**.

ACER's LNG price assessment will consist of a weighted average price of daily LNG spot transacted quantities and will be based on transactions concluded and reported for the purchase or sale of LNG with delivery in the European Union. A rolling window of up to five working days will be used to aggregate and compute the transactions used in each daily LNG price assessment.

Both LNG buyers and sellers will be requested to report data to ACER by filling in an individual reporting form. In case of discrepancies in the transaction data reported by buyers and sellers, ACER will use the data reported by the LNG buyer as the main reference.

2. In case less than a defined number of spot transactions would be available for a daily price assessment³, ACER will complementarily make use of the data on selected reported spot bids and offers. The mid-price of the most favourable bids and offers reported for a given assessment date will be estimated and used as additional input for the price assessment calculation. The *Guidance on reporting LNG market data* provides clarification about the types of bids and offers and how they shall be reported. When doing the LNG price assessment, only reported bids and offers that relate to firm bid or offer commitments that are listed in the

² See [ACER LNG price assessments webpage](#)

³ The initial threshold is that the number of transactions within the 5 working days rolling window is lower than five.

relevant LNG trading platforms and are subject to a matching process will be taken into account.

3. On occasions where there is no sufficient LNG market data reported for the price assessment during the relevant rolling time window, the last valid daily price indication will be repeated. ACER will communicate that the value is repeated and will share the reason for the repetition via the same ACER publication channels.

ACER will disregard transactions that appear to be outliers, since these could potentially distort the price assessment and its results. Inconsistencies in the reported information or suspected motivation to unfairly influence the price discovery process would typically be grounds for the removal of data. ACER will also consult the reporting parties to cross-verify information and assess if transaction outliers might have been caused by a data quality issue. If misreported transactions get corrected within the timeframe defined in the reporting guidance, ACER will make use of the corrected data.

Moreover, in order to meet the mandate established in the Regulation, in the unlikely situation that more than half of the pricing data collected in the five-day rolling window is provided by a single submitter, the price assessment will refer to the last valid price indication to avoid dependency on a single entity providing an unacceptably significant proportion of data.

Integrity of the reporting process

The ACER *Guidance on reporting LNG market data* specifies the criteria that define who is required to submit LNG market data to ACER for the purpose of LNG price assessments, the quality control procedures for the evaluation of the identity of the reporting party through the use of CEREMP, and the criteria applied to reporting persons who are registered to submit LNG market data on behalf of an LNG market participant.

As defined by Article 19(1) of the Regulation, the LNG price assessment shall be published daily, and no later than 18:00 CET, for the outright transaction price assessment. Furthermore, Article 20(1) of the Regulation stipulates that LNG market participants shall submit daily to ACER the LNG market data in accordance with the specifications set out in Article 21, in a standardised format, and as close to real-time as technologically possible before the publication of the daily price assessment.

In order to allow ACER to perform the price assessment based on the submitted data of a given day in an adequate and timely manner (i.e. no later than 18:00 CET), it is imperative that LNG market participants also comply with their reporting obligation in a timely manner. In this respect, LNG market participants subject to the reporting obligation under the Regulation shall keep in mind at all times that their reporting obligation primarily specifies real-time reporting of LNG market data (as close to real-time as technologically possible).

In case a transaction or the placing/communication of bids and offers occurs after the publication of the price assessment on a given day or during weekends or bank holidays

(according to the published ACER calendar⁴), LNG market participants shall still report the details of the LNG market data as close to real-time as technologically possible and no later than by 14:00 CET on the next working day.

If a transaction does not specify whether an LNG delivery is for an EU terminal on the day of the transaction but the buyer later decides to deliver the LNG to an EU LNG terminal, the transaction becomes reportable when the slot for the vessel is registered at the regasification terminal port authority⁵.

3. Data analysis and producing the LNG price assessments

ACER will publish **two distinct LNG price assessments** on a daily basis. Both price assessments will solely take account of **spot-type transaction contracts⁶ with ‘delivery ex-ship’ (DES) terms of delivery⁷** that specify an EU delivery terminal in the contract.

The daily price assessments will primarily relate to cargoes offered for delivery within the second half-month ahead of the transaction date. Annex 2 *Reporting period* includes a table with the reference delivery periods appraised in each publication date⁸. The price distinction originates from the two separate delivery market areas being considered: North-West Europe and South Europe.

Table 1: Summary of ACER’s LNG price assessments

	Type of contract and trading terms	Market area	Delivery period
1	DES LNG Spot NWE	North-West Europe	Second half-month ahead
2	DES LNG Spot SE	South Europe	Second half-month ahead

As for the terminals considered in each market area:

- North-West Europe (NEW) comprises the regasification terminals in Belgium, France (except Fos Cavaou and Fos Tonkin), Germany, Lithuania, the Netherlands, Poland and Spain (only Mugaros and Bilbao)
- South Europe (SE) comprises the regasification terminals in Croatia, France (Fos Cavaou and Fos Tonkin), Greece, Italy, Portugal and Spain (except Mugaros and Bilbao).

⁴ Available on the REMIT Portal, under ‘Contact Us’.

⁵ LNG terminals have clear procedures for the registration of arriving vessels. See [an example](#) for LNG vessel registration at the Dutch GATE terminal

⁶ As stated in the Reporting Guidance, cargoes originally procured under portfolio framework arrangements that are subsequently diverted and resold to other buyers are expected to be reported as spot-type transactions.

⁷ The terms of delivery shall be specified by referring to the respective Incoterms applicable for LNG transactions. In Delivery ex-ship trading terms, the seller is responsible for the LNG until it is delivered to a specified port, whilst the delivery point is specified in the contract. See Annex 1 data field 10.

⁸ Each daily price assessment will primarily take account of the cargoes arriving during a defined half-month period. The reference period is the second half-month ahead of the transaction date. The period shifts at the specific dates referred in Annex 2. As an example, on 10 February 2023, the second half-month ahead reference period would be H1 March 2023, consisting of the days 1 to 15 March 2023, while on 24 February 2023, the second half-month ahead reference period would be H2 March 2023, consisting of the days 16 to 31 March 2023.

LNG terminals are identified by an EIC Z or W code. The data collection system will allow to report only delivery points listed in [Annex IX of the REMIT Manual of Procedures: List of LNG facilities subject to reporting according to REMIT](#).

Considering the low number of transactions likely to be reported, ACER will not build a forward curve of prices for different delivery periods. ACER intends to publish a **unique referential daily spot price assessment per market area**, which will reflect the prices of the **spot LNG cargoes arriving up until the second half-month ahead from the transaction date**, which is the most usual delivery period related to LNG spot transactions. The prices of the cargoes with delivery periods on later dates will be taken also into account, by means of adjusting their values into the referential second half-month ahead period (see further considerations in Section 4, *Data Normalisation*). In the event that cargoes are reported for arrival on earlier dates, such records of transactions will be taken into account without adjustment.

Transactions executed under mid- and long-term portfolio contracts (which ordinarily refer to the various transactions with similar price formulas and delivery points executed under a framework contract of multiple years) will initially not be used in the daily price assessment. ACER will analyse the LNG market and may explore the possibility of providing price assessments of portfolio contracts in the future.

LNG cargoes transacted under free-on-board (FOB)⁹ terms of delivery will not be considered in the daily price assessment either, even if those cargoes could eventually be delivered at EU terminals.

4. Data normalisation

ACER will present the price data of the reported Spot DES cargos in terms of delivery location and of delivery dates (arrival start and end dates).

Delivery location

Selected LNG terminals will be used as locational references when building the price assessments for each market area. The selected terminals meet the criteria of having large regasification capacities, attracting more spot-type cargoes than other terminals, and having closer access to liquid gas trading hubs, where the prices of the cargoes can be hedged.

- In the NWE market area, the referential LNG terminals are Dunkerque (FR), Rotterdam (NL) and Zeebrugge (BE). The prices of the cargoes delivered to other terminals within the NWE market area will be adjusted to deliveries in the zone comprised by the above terminals, with adjusted shipping times and shipping rate assumptions.
- In the SE market area, the referential LNG terminals are Barcelona and Sagunto (ES), and Fos Cavaou and Fos Tonkin (FR). The prices of the cargoes delivered to other

⁹ In FOB transactions the buyer acquires the LNG and is responsible for shipping. The delivery point may not be specified in the original contract.

terminals within the SE market area will be adjusted to deliveries in the zone comprised by the above terminals, with adjusted shipping times and shipping rates¹⁰.

Delivery dates

ACER's LNG price assessments will primarily reflect the prices of spot DES LNG cargoes arriving up until the second half-month ahead of the transaction date. ACER will not build a forward curve of different prices for different delivery periods. This approach is taken in view of the likely low number of transactions and with the aim of building the price assessments on actual data.

However, in order to also make use of transactions for later delivery dates, the prices of the cargoes reported with a delivery date soon after the second half-month will be normalised as if the delivery were occurring in the second half-month ahead from the transaction date. The prices of the transactions for delivery within the second half-month ahead – or earlier – will not be normalised, while the prices of the transactions for delivery within the third half-month or fourth half-month ahead will be.

By applying this adjustment, the forward LNG prices assessed by relevant Price Reporting Agencies ('PRAs') will be used.

- In the case of the NWE market area, the relevant PRA's (*DES Northwest Europe*) price for the half-month period that comprises the actual period of delivery will be divided by the relevant PRA's (*Northwest Europe*) price that encompasses the second half-month ahead. That factor will be used to normalise the transaction price reported for delivery outside the second half-month ahead.
- For the SE market area, the relevant PRA's (*DES South Europe Marker*) prices will be used accordingly.

Rolling window of days

Due to the low number of LNG transactions, ACER will use for each daily assessment the transactions (and, when necessary, selected bids and offers) transacted across the last five working days (MON-FRI). ACER's price assessment will consider a rolling time series of daily values.

ACER will assign higher relevance to the transactions transacted on the day when the assessment is published. In case there are no transactions on the publication day, ACER will still make use of the referred rolling window, but will flag this occurrence in the daily assessment publication. If the number of transactions assessed is sufficient, ACER reserves the right to reduce the initially suggested period of five working days.

Outright prices and indexed prices

¹⁰ In practice, after consulting with the industry, ACER assesses that in the South Europe market area, the LNG shipping costs barely differ among terminals except for maybe the terminals in Greece and Croatia. In North-West Europe shipping might slightly differ for Lithuanian and Polish terminals.

LNG transactions can result in an outright fixed price or in an indexed price formula. The latter typically results in a floating price settled days after a transaction takes place. To build its daily price assessments, ACER will make use of the prices reported by market participants in the reporting form.

According to the *Guidance on reporting LNG market data*, if the original price of the transaction refers to an outright fixed price, market participants should report it and ACER will directly make use of that price for the daily assessment. If the transaction price is based on a price formula that results in an outright fixed price that is known at the time of a transaction, ACER will make use of that fixed price. Finally, if the price of a transaction cannot be expressed as an outright fixed price at the time of reporting because it results from an indexed floating value, ACER will make use of the estimated price that market participants are requested to provide, irrespective of the availability of the index value at the time of reporting. In doing that estimate, reporting parties are asked to use the settlement price of the index or indices used in the formula as from the previous day of the transaction.

5. Price assessment publication

Peer review process

All ACER price assessments will be produced first by a reporter (analyst) and then peer-reviewed by a second reporter. Eventually, the assessment report shall be approved by a senior reporter prior to publication. This peer review process, which is fully auditable, is in place to make sure that pricing procedures and methodologies are correctly and consistently applied and to ensure the integrity and quality of the published price assessments. Relevant information, including all price input and editorial judgements, are securely retained in ACER's database for at least five years to maintain a full audit trail. Price assessors are formally trained in the price discovery process and must abide by a written LNG price assessment Standard Operating Model.

Publication

At the end of the peer review process, the daily price assessment will be published each working day at 18:00 CET, taking account of the LNG market data reported until 16:00 CET. The daily price assessment will be published via ACER's publication channels (TERMINAL).

The daily publication will show the weighted average price resulting from this methodology per each of the two considered market areas. It will also include the spread between the LNG prices assessed at each market area and the month-ahead settlement prices of selected trade hubs. Moreover, ACER will indicate in the form the number of transactions considered in the daily price assessment, the traded volume represented by the considered transactions, and the number of LNG terminals covered by the considered transactions.

Corrections and delays

If an assessment is published incorrectly, it will be rectified and republished as soon as possible. A pricing notice explaining the reasons for the correction will also be published promptly.

ACER uses several procedures and measures to avoid delays in the publication of its assessments. In the event of a delay, however, ACER will communicate it as soon as possible.

In the event of late publication, only the data that has been received within the correct standard timeframe will be included in the assessment. No assessment will be amended due to the emergence of new data or market activity after the initial publication. Retrospective changes to the published values will only be made in case of a technical, administrative or interpretation error.

6. Methodology revision

ACER aims to continually develop and periodically review its methodologies in consultation with relevant stakeholders. This price methodology will be revised in the first quarter of 2023. The revision will entail a consultation process, aiming to improve the assessment and make the publications as useful as possible.

7. Measures to prevent conflicts of interest

ACER has been implementing a Policy for the Prevention and Management of Conflicts of Interest since 2015¹¹. The prevention and management of conflicts of interest is a vital part of good administrative behaviour of the EU institutions, bodies and Agencies. It is crucial to ensure ACER's independence and transparency, and to maintain the stakeholders' and citizens' trust in ACER's integrity. In the regulatory practice, the highest level of integrity is required to ensure the quality and credibility of regulatory measures. Any ACER staff member is obliged to carry out his/her duties independently, objectively, impartially and in keeping his/her duty of loyalty to the European Union. This Conflict of Interest Policy will also apply to the LNG price assessments. ACER staff members are bound by the EU Staff Regulations and the Conditions of Employment of Other Servants (CEOS) and its implementing rules as adopted by ACER's Administrative Board and the Director. The relevant rules in the Staff Regulations with respect to conflicts of interest can be found in Title II (Rights and Obligations).

8. Queries and complaints

A written and published procedure for receiving, investigating and retaining records concerning complaints about ACER's LNG price assessment process and results will be made available. The details concerning the complaints will be documented and published by ACER.

The procedure includes the option to seek recourse from an independent external auditor appointed by ACER to investigate such complaints.

¹¹ Decision AB No 2/2015 of the Administrative Board of ACER of 31 January 2015 laying down a policy for the prevention and management of conflicts of interest.

9. External auditing

An external auditor, with appropriate experience and capability, will be tasked with reviewing and reporting on ACER's adherence to its stated methodology criteria and the requirements of the principles. The first resulting audit should be completed within one year of the application of this methodology and its results published within 15 months of the application of the methodology. Subsequent audits should take place annually and the results should be published three months after each audit is completed with further interim audits carried out as appropriate.

These measures are intended to promote the reliability of assessment methodologies through stakeholder input and alert a market authority to possible factors that might affect the reliability of assessments.

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