



MARKET PRICE INDICES: GUIDELINES FOR PRICE AGGREGATORS AND DATA PROVIDERS

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MARKET PRICE INDICES: GUIDELINES FOR PRICE AGGREGATORS AND DATA PROVIDERS IN THE [OIL] [GAS AND] POWER MARKET[S]

These guidelines have been produced by The Futures and Options Association (FOA) with contributions from (names of reviewers and contributors).

The guidelines are intended to provide organisations which carry on the business of collecting, collating and averaging transaction price data for the purpose of producing reference prices and indices (“price aggregators”) and organisations which submit transaction and price data to a price aggregator (“data providers”) with a framework for good practice procedures and controls that are appropriate for producing reference prices which are:

- representative of transactions undertaken in the relevant market i.e. accurate;
- published in timely fashion ie transparent;
- capable of being relied upon by market participants as accurate indicators of market prices, even in times of market stress i.e. robust;
- capable of independent verification i.e. credible.

It is recognised that there may be more exacting processes and procedures that price aggregators and data providers may wish to adopt; that there are other processes and procedures which could bring about the same key objectives; and that adoption of any of the recommendations of these guidelines will inevitably be subordinated to any legal, regulatory or commonly acceptable professional standards applicable to price aggregators and/or data providers as well as the practicalities of data collection and dissemination.

These Guidelines are subject to the prevailing laws, regulation and guidance of any relevant jurisdiction and, in the event of conflict, shall take precedence. This is particularly the case with rules designed to prevent market manipulation and other forms of market abuse.

Introduction

Price transparency plays an essential role in the development of new products, measuring performance and facilitating market efficiency, participation and liquidity. However, in order to meet these objectives, published prices and the processes involved in the submission, collation, aggregation, averaging and distribution of price data must, if those prices are to enjoy the confidence of market participants, be transparent, free (so far as reasonably possible) of error, timely, complete, verifiable/auditable and properly representative of the underlying supply and demand in the market in question. Due regard should also be paid to securing and maintaining the confidential nature of certain aspects of the data, particularly, wherever appropriate, the identity of data providers and counterparties to transactions.

The recommendations set out in these guidelines fall essentially into two parts, namely, good practice in the gathering and submission of data by providers to price aggregators and good practice in the aggregation and distribution of reference prices by price aggregators.

1. Recommendations for the aggregation of transaction and price data

Principle 1: A price aggregator should take all reasonable steps to ensure that data providers provide complete and accurate data on all relevant market transactions according to the criteria laid down by the price aggregator.

1.1.1 A price aggregator shall:

- (a) nominate its data providers which may be brokers, dealers or other market participants or operators of exchanges or other trading platforms; and, in doing so, shall take into full account the need for its aggregated prices and indices to be properly reflective of the level of business undertaken and the numbers of participants in the market in question;
- (b) specify the types of transactions that are to be reported to it (“eligible transactions”) (see para 1.1.2);
- (c) set down clearly, precisely and transparently the criteria and specifications of the information and data which is to be provided in relation to eligible transactions;
- (d) make provision for all reasonably foreseeable eventualities, including specifying:
 - the market circumstances in which it may be permissible to include market quotations and other indicators of price (e.g. when the market is deemed to lack sufficient liquidity) (see also para 1.1.5)
 - any circumstances when it may be appropriate and necessary for data to be excluded whether from only certain data providers or generally;
- (e) specify the times and periods governing the submission of the data; and
- (f) agree with its data providers the threshold and level of materiality with regard to the reporting of errors by them and the timing of such reports.

1.1.2 Subject to para 1.1.5, an “eligible transaction” will usually be any transaction which:

- (a) is entered into by a nominated data provider and executed for his own account or on behalf of a customer or counterparty or executed on the market or trading platform of a nominated data provider;
- (b) is entered into for a proper trading purpose in accordance with acceptable market practices (e.g. for the purposes of hedging, investment, speculation or arbitrage and, in the case of transactions undertaken for customers, in accordance with their orders); and

- (c) meets the criteria and specifications laid down by the price aggregator in accordance with para 1.1.1 (c).

1.1.3 A transaction may not be regarded as an “eligible transaction” if it is, for example:

- (a) an “accommodation” trade i.e. an off market transaction that has no relation to supply and demand fundamentals (such as the swapping of delta positions between two counterparties trading an option) and which is entered into for the purpose of concealing or committing an abuse;
- (b) a “wash trade” i.e. a transaction that has no economic purpose and is entered into in order to create a false appearance of trading activity;
- (c) any transaction which is entered into or is attempted to be entered into other than in accordance with the established rules and procedures of the relevant market;
- (d) an inter-company proprietary transaction;
- (e) executed erroneously or is subsequently reversed or is otherwise identified as ineligible by the market specific appendices to these Guidelines;
- (f) an option and simultaneous delta swap, where, for reasons of convenience, the price of the simultaneous delta is away from market prices at the time of the transaction by a percentage set by the Market Oversight Committee (see para 1.5.1 et seq).

It shall be the responsibility of each Index Oversight Committee (see para 1.5.1 et seq) to define and declare any other transactions which are not “eligible transactions”, taking into account good market practice and the nature of the market and to ensure that such information is publicly available.

1.1.4 A price aggregator shall not include any transaction which it knows or reasonably suspects to be a transaction which does not meet the criteria laid out in para 1.1.2 or which is not eligible by virtue of para 1.1.3.

1.1.5 It is recognised that there may be circumstances (e.g when a market is first established or where there is insufficient transaction data) where it might be appropriate to include other price sources (eg price quotations). The nature of these sources and the weight that is given to them in the aggregation process shall be transparent and as directed by and subject to the oversight of the Index Oversight Committee (see para 1.5.1 et seq).

Principle 2: A price aggregator should ensure that the methodology for calculating and aggregating prices is sound, transparent and consistent.

1.2.1 A price aggregator must take all reasonable steps to ensure that aggregated prices produced by it are (i) founded on transactional data that meets the conditions and criteria laid down by it; and (ii) properly reflective of the demand

and supply of the market in question (e.g. through the setting of appropriate minimum data requirements).

1.2.2 In particular and so far as appropriate and reasonably practical, the safeguards, processes, rules and requirements of a price aggregator should be designed to:

- (a) secure the inclusion only of “eligible transactions” (see paras 1.1.2 and 1.1.3);
- (b) prevent the manipulation or mis-use of data;
- (c) prevent the inclusion of any data submitted after the times and intervals set for the submission of data or which is manifestly erroneous;
- (d) prohibit the double-counting of transactions that may be submitted by different sources (e.g. by both counterparties to the same transaction or by a counterparty and the operator of the market on which the transaction was effected) (see also para 2.1.1(e));
- (e) facilitate effective transaction and market monitoring to ensure that, on a continuing basis, market participants, the volume of whose trading represents a material percentage of trades on the relevant market, are invited to submit their prices;
- (f) ensure that the approach to identification, reporting and elimination of errors is appropriate, effective and managed consistently and in a timely manner;
- (g) be statistically sound and unbiased;
- (h) be capable of producing aggregated prices on a timely basis (see paras 1.2.6 and 1.4.2) that are properly reflective of the data submitted to the price aggregate and the performance of the underlying market as indicated by that data;
- (i) maintain, save in extreme circumstances or in the event of severe market disruption, consistency across a variety of market conditions including periods of low volumes or high volatility.

1.2.3 When calculating and aggregating transaction data, a price aggregator shall aggregate all admissible data from each nominated data provider and use a volume-based weighted average of all eligible transactions which accords with its published methodology and is appropriate to the nature of the relevant market.

1.2.4 A price aggregator shall ensure that all data providers and users of its indices are advised on a timely basis of any deficiencies in the process of aggregation or of any change in the nature of the quality of the prices produced by it which can be reasonably expected to impact upon their reliability or the inclusion of transactions which are not representative of the agreed sample size.

1.2.5 A price aggregator shall maintain continuity and consistency in calculating and publishing their indices and observe on a continuing basis the procedures laid down by it and shall not change them or any specifications to their indices otherwise than:

- (a) where it is agreed with the Index Oversight Committee or its equivalent (see paras 1.5.1 *et seq.*) that changes to the method of computation and composition of an index would be beneficial to its users or is a matter of market necessity; and *either*
 - (i) prior to the implementation of any change, data providers and users of their indices are given sufficient time to comment on the proposed change and to introduce any changes in their systems or reporting practices so as to enable them to meet the new requirements of the price aggregator; *or*
 - (ii) there are exceptional circumstances which necessitate an immediate change (e.g. an error in the recording, calculating or aggregation of data which is so significant as to require immediate correction in order to meet the criteria of the index); and
- (b) on all reasonable steps being taken to ensure that full and fair notice is given of the changes before or at the time of **publication**.

NB: In circumstance where it is not possible to agree any change in a timely fashion with the Index Oversight Committee, the price aggregator shall use all reasonable endeavours to secure the agreement of the Committee Chairman and such of its members as can be contacted.

1.2.6 A price aggregator should ensure that it operates according to timetables which enable it to produce its prices on prearranged dates or over such periods as may have been contracted by it and which:

- (a) allow sufficient time for the providers of data to undertake their obligations to verify the accuracy and completeness of their data;
- (b) enable the price aggregator to perform the necessary calculations in good time;
- (c) are reviewed regularly and are subject to continued close collaboration with data providers to ensure their practicality.

1.2.7 A price aggregator shall publish the processes, procedures and methodology by which it calculates and aggregates its prices and produces market indices.

Principle 3: A price aggregator must ensure that it has practices and procedures in place which are designed to (a) preserve the confidentiality of commercially sensitive data; (b) manage conflicts of interest; and (c) handle complaints.

- 1.3.1 To the extent that a price aggregator is able to access and hold commercially sensitive information, it should ensure that:
- (a) in accordance with the contractual terms agreed with its data providers, that information is protected and kept confidential to the highest reasonable and lawfully permissible standard of care;
 - (b) there are procedures in place to deal with any violation of any obligation of confidentiality owed by it.
- 1.3.2 A price aggregator shall take all reasonable steps to ensure the general independence of its business and the management of conflicts of interest, such that the process of aggregation and the exercise of its discretion in publishing indices may be undertaken without external interference or any undue influence from a single interest group (subject only to the role of the Index Oversight Committee (see Principle 5)).
- 1.3.3 A price aggregator, in meeting its obligations to preserve confidentiality or manage effectively any economic, personal or other conflicts of interest, should consider whether it is necessary to engage the services of a third party to receive, process or store sensitive data.
- 1.3.4 A price aggregator shall ensure that it has adequate and fair procedures for handling and investigating complaints received in relation to the prices and indices produced by it, which may include adjudication by reference to the Index Oversight Committee (see Principle 5).

Principle 4: A price aggregator should ensure that its indices and the processes, procedures and methodologies for the collection and aggregation of the constituent data and any changes thereto are transparent and publicly available.

- 1.4.1 A price aggregator shall publish its indices on each business day in such a way that they are readily accessible and at a time, which is appropriate for the market (eg at start of the business day).
- 1.4.2 A price aggregator shall, wherever economically feasible, use its best endeavours to ensure that its prices are produced in or as near as possible to real time and that the timeliness of its prices are clearly stated. (See also para 1.2.6.)
- 1.4.3 Information to be published by a price aggregator should, in addition to publication of the Index itself in accordance with para 1.4.1, include the information and notifications set out in paras 1.1.1 and 1.2.4 to 1.2.7; and all non-sensitive transactional data provided to it and upon which its indices are founded (e.g. the prices and size of transactions and total transaction volumes) should be made available on request;
- 1.4.4 Wherever the calculation is based on less than five eligible transactions (or on such other calculation as may be decided by the Index Oversight Committee) or no eligible transactions have been executed and reported during a working day

or where there are no eligible transactions capable of being calculated for a Saturday and Sunday for the combined weekend period, a notification to that effect should be included on the Index page.

Principle 5: A price aggregator should establish an independent committee of users of their indices (e.g. an Index Oversight Committee) to review the rules and procedures for the aggregation of data and any changes that may be introduced to those rules and procedures.

1.5.1 A price aggregator shall establish an independent Index Oversight Committee or its equivalent (“the Committee”), which shall comprise a representative cross-section of users of the indices compiled and published by the price aggregator, data providers and, with the agreement of the price aggregator, market commentators, experts and such other persons as may be deemed by the Committee to be able to assist it in fulfilling its responsibilities.

1.5.2 The role of the Committee shall be:

- (a) to advise the price aggregator on processes and methodologies for receiving, calculating, aggregating and displaying transaction data and prices;
- (b) to review the procedures and methodologies for the aggregation of data and any changes proposed by the price aggregator;
- (c) to approve the production/adoption of any new indices proposed by the aggregator or to the aggregator by the wider market;
- (d) to liaise with any associated trade association and provide a link between that trade association and the price aggregator; and
- (e) to carry out any other activities that may be specified in this Guidelines (see paras 1.1.3, 1.2.1, 1.2.5(a), 1.3.2, 1.3.4, 1.4.3(c), 1.5.1 and 1.5.5).

1.5.3 In carrying out its role, the Committee shall:

- (a) draw up, publish and act in accordance with Terms of Reference, which shall set out the remit, powers, duties and procedures of the Committee;
- (b) manage effectively any relevant conflicts of interest;
- (c) appoint from amongst its members a Chairman; and
- (d) meet on at least a quarterly basis.

1.5.4 Prior to issuing any recommendations or making any decisions, the Committee shall consult with the price aggregator and take into full and fair account the interests of the market (and particularly the need for price integrity) as well as the interests of the users of the market.

- 1.5.5 The Committee shall be responsible for ensuring that, as far as possible, transactions included in the index are reflective of the supply and demand fundamentals prevailing in the relevant market at the time the trade was executed (and should review periodically therefore the merits and appropriateness of including accommodation trades and sleeve trades).

Principle 6: A price aggregator should make all of its process and methodologies for the collection, calculation and verification of data available for audit and maintain appropriate records of the same.

- 1.6.1 A price aggregator should ensure that it maintains appropriate records of the process of collecting, aggregating and publishing data (or any significant changes or errors in such processes) and details of any audit of process or procedure.
- 1.6.2 [*details of specific information to be recorded*]
- 1.6.3 Records should be kept for a period of [2 years] or until the completion of the next audit in time after the relevant record was made, whichever is the later.
- 1.6.4 In the case of records requirements that may be required by a price aggregator to be observed by data providers, the price aggregators shall take into full account the existing requirements and practices of each of its data providers and not seek to impose additional record keeping requirements unless it is absolutely necessary for the purposes of this Principle and Principle 6 in Section 2.
- 1.6.5 The auditing of records, processes, procedures and methodologies should be carried out at least annually by or under the auspices of an independent body on behalf of all market participants and the findings reported to the price aggregator and to the Committee.
- 1.6.6 The scope of the audit should be sufficient to ensure:
- (a) that all data is collected, handled, and retained in compliance with the price aggregator's published procedures and any relevant contractual arrangements entered into with data providers;
 - (b) that the process for aggregating data and any change to that process accords with the price aggregator's published methodologies and any contractual arrangements that may have been entered into with data providers;
 - (c) that the processes, procedures and methodology of the price aggregator are broadly adequate for the purposes of being robust and fairly reflective of the performance of the market;
 - (d) that the price aggregator has conducted periodic and random tests to satisfy itself that its indices are accurate and objective;

- (e) that the procedures, processes and methodologies are consistent with principles and recommendations set out in these guidelines;
 - (f) that the Committee has carried out its oversight role and responsibilities as required of it.
- 1.6.7 The results of any audit should be certified by a duly qualified individual and reported to both the price aggregator and the Committee.
- 1.6.8 Upon receipt of the audited report, the Committee shall:
- (a) disclose it to the price aggregator, who shall take all reasonable steps to correct any material concerns and deficiencies; and
 - (b) shall give due consideration to the appropriateness of publishing either the report in whole or in part and to whom relevant market interest considerations and the need for any published information to be fair and impartial.

2. Recommendations for the collection and submission of transaction data

Principle 1: A data provider should take all reasonable steps to ensure that the data provided by them is complete, accurate and free of error.

2.1.1 A data provider should make all reasonable efforts:

- (a) to provide the requisite data on and only on all “eligible transactions” (see para 1.1.2)¹;
- (b) to ensure that the data is correct, accurate and complete at the time of its submission to the price aggregator;
- (c) to ensure that the process of identifying and correcting errors is effective;
- (d) to notify any errors in transactional data to the price aggregator as soon as reasonably practical after they are discovered and in accordance with any procedures laid down by the price aggregator; and
- (e) to eliminate the possibility of double counting (e.g. sleeve trades should be counted twice only if they are transacted “at the market” i.e. within the bid and offer spread prevailing at the time, otherwise they should be counted once i.e. where the trades are transacted at the same price).

If no transactions are executed during the period in question, the data provider should advise the price aggregator formally of that fact at the intervals and times requested by the price aggregator.

2.1.2 A data provider should submit its data in a standardised usable format to the price aggregator either electronically or, if that is not possible, by facsimile.

2.1.3 A data provider should ensure that, prior to submitting data to a price aggregator, it has entered into a contractual arrangement with the price aggregator which *inter alia* addresses the need to protect the confidentiality of any commercially sensitive information which may be passed on to the price aggregator as part of the process of data provision (see para 2.5.3(d)).

2.1.4 Any data provider wishing to cease giving data to a price aggregator should give, wherever possible, at least one month’s notice of any cessation in data provision.

¹ Where a data provider is in doubt as to whether a transaction is or is not an “eligible transaction” the position should either be clarified and agreed with the price aggregator or not submitted to the price aggregator.

Principle 2: A data provider should take all reasonable steps to ensure that the data provided by it is submitted in accordance with the specifications for data provision set by the price aggregator.

2.2.1 A data provider should submit data on a transaction-by-transaction basis and in accordance with the specifications and within the timelines for data provision set by the price aggregator.

2.2.2 A data provider should include all the elements of information required of it under the specifications of data provision set by the price aggregator including, for example, price, size, time and other details of each reportable transaction sufficient to identify its nature and the market of execution (i.e. a regulated market, a multilateral trading facility (MTF) or an organised trading facility (OTF) or whether it was traded over-the-counter (OTC)).

If a data provider is prohibited by its counterparty from providing any information required to be provided by it under its terms of business with a price aggregator, it shall ensure that the price aggregator is informed of that fact.

Principle 3: A data provider should have processes and procedures in place which are designed to identify, manage and mitigate conflicts of interest relevant to the provision of transaction data, including particularly the establishment of “Chinese Walls” or some other independence policy or procedures.

2.3.1 A data provider should ensure that it manages appropriately any conflicts of interest which could undermine the integrity of the process of data provision or the data itself.

2.3.2 In considering how to manage conflicts of interest faced particularly by personnel engaged in a critically important part of the process of data provision, a data provider should give priority consideration to allocating important functions to individuals who are either not subject to conflicts of interest or, if they are, are subject to an independence policy designed to ensure that conflicts of interest are appropriately managed.

2.3.3 Critical parts of the process include, but are not limited to:

(a) ensuring that the provision of data is made by a department or individual(s) independent of the front office so that anyone with, for example, an economic interest in the price index or the execution of relevant transactions is excluded from the process of gathering, collating and providing transactional information;

(b) ensuring that individuals who are responsible for checking the completeness and accuracy of data are not otherwise engaged in its direct provision and are also independent of the front office.

2.3.4 If it is not economically viable for any data provider to segregate critically important functions, it must take steps to satisfy itself that the individuals responsible for these functions are able to manage such conflicts of interest

effectively and reliably and to monitor the ongoing effectiveness of their management of those conflicts.

Principle 4: A data provider must ensure that there are appropriate safeguards and internal monitoring on a regular basis designed to prevent the manipulation or misuse of data.

2.4.1 A data provider should take all reasonable steps to ensure that data submitted by it is properly reflective of actual prices of “eligible transactions” (see para 1.1.2) within the periods and according to the specifications laid down by the price aggregator.

2.4.2 [*anti-misuse provisions*]

Principle 5: A data providers should establish by contract the nature of its relationship with and the terms of business by which it submits data to a price aggregator.

2.5.1 A data provider should ensure that it has entered into a clear and enforceable contractual arrangement with a price aggregator, setting out each of the parties’ obligations, duties and rights, the basis on which data will be submitted to and commercially sensitive information held and used by a price aggregator.

2.5.2 Terms of business referred to in para 2.5.1 should be agreed before a data provider submits data to a price aggregator.

2.5.3 The contractual arrangements made between a data provider and a price aggregator should, where appropriate, cover all the matters referred to in these Guidelines, including:

- (a) the nature of the data to be provided by the data provider and the procedures and periods within which and the times and date by which that data is to be provided to the price aggregator;
- (b) the parameters governing the use of that data by a price aggregator and all rights and obligations of both of the parties in relation to that data;
- (c) the terms upon which a data provider may cease giving data, together with any appropriate period of notice of cessation in data provision;
- (d) specific provisions addressing the need to maintain commercially sensitive information to the highest reasonable level of confidentiality and for protection against the release or mis-use of data by the price aggregator;
- (e) disclaimers and limitations of liability, as appropriate, addressing, for example, the consequences of errors in either the submission or aggregation of data or the impact of *force majeure* events.

Principle 6: A data provider shall allow its practices and procedures for the provision of data to be reviewed by an auditor appointed by a price

aggregator and shall maintain appropriate records covering the collation, verification and submission of data.

- 2.6.1 The duration and content of records should accord with any reasonable requirements of the price aggregator (see also para 1.6.4) and should include all information relating to the provision of data necessary to facilitate effective audit of the process (or any significant changes in process), error management and details of any audit of process or procedure.
- 2.6.2 Records should be kept for a reasonable period of time, but, in any event, until completion of the next audit in time after the relevant record was made.
- 2.6.3 Data providers should be ready to submit on reasonable notice for verification by an auditor appointed by a data aggregator all relevant records, practices, procedures and controls relevant to their responsibilities for collecting, verifying and submitting transactional data to a price aggregator; and it shall be open to any auditor appointed for this purpose to rely upon the internal compliance monitoring and auditing procedures of the data provider itself or any audit or inspection carried out by any regulatory authority of the data provider or an organised trading venue.
- 2.6.4 The scope of the audit should be sufficient to ensure:
- (a) that all data is collected, handled, verified and submitted in compliance with the price aggregator's published procedures and any relevant contractual arrangements entered into with the price aggregator;
 - (b) that the processes, procedures and controls for data provision are robust and appropriate and that the data submitted to price aggregators is accurate in accordance with the price aggregators specifications on an appropriately regular basis;
 - (c) that the procedures, processes and controls of the data provider are consistent with the principles and recommendations set out in these Guidelines.
- 2.6.5 The results of any audit carried out pursuant to para 2.6.1 may be disclosed to the Committee in a suitably anonymised format to ensure that commercial confidentiality is maintained and that any potential or existing conflicts of interest are taken fully into account.