Europex
Association of European Energy Exchanges

- Position Paper -

MiFIR pre-trade transparency regime: making it work for commodity derivatives

Brussels, 25 June 2018 | The purpose of this paper is to provide ESMA and National Competent Authorities with **specific recommendations** in support of their work with regard **to amending certain parts of Regulation 2017/583 ('RTS 2')**[1], relating to the MiFIR pre-trade transparency regime for non-equity products.

Europex members have long argued that, in its present form, the regime is not fit for purpose and cannot be applied to trade registration facilities in energy derivatives markets. Should these pre-arranged trades be no longer reported to regulated markets for clearing purposes, this would compromise their vital role in supporting the hedging activity of commercial market participants and in mitigating wider systemic risks.

We have recently provided an initial overview of two alternative suggestions for the revision of RTS 2. The first proposal suggested replacing the current methodology for calculating Large in Scale (LIS) and Illiquid Instrument (IL) waiver thresholds for commodity derivatives with a product-specific approach based on well-established practices of trading venues. The second proposal suggested a 'quick-fix' approach, whereby the current thresholds are to be recalibrated in order to better reflect the actual market conditions.

As a follow-up to this recent position paper, the present memo provides further details on both proposals. Those are laid out in two different sections:

1. **Key principles for determining pre-trade transparency thresholds for commodities**
2. **Re-calibrating the LIS and IL waiver thresholds for energy derivatives**

[1] Commission Delegated Regulation (EU) 2017/583 of 14 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on transparency requirements for trading venues and investment firms in respect of bonds, structured finance products, emission allowances and derivatives, OJ L 87, 31.03.2017, pp. 229–349.

1. Key principles for determining pre-trade transparency thresholds for commodities

This section emphasises several key principles as a basis for developing a workable method for determining the standard size of trades in a given instrument for the purpose of setting IL thresholds under RTS 2. It also puts forward a proposal on how to determine LIS levels using volume-based measures of liquidity.

By way of background, the current thresholds for energy commodity derivatives are set out below:

Table 1: Current threshold values for energy commodity derivatives as set out in RTS 2

	IL waiver (Table 7.1, Annex III, RTS 2)		**LIS waiver (Table 7.2, Annex III, RTS 2)**
	Average daily number of trades [quantitative liquidity criterion 2]	Average daily notional amount (ADNA) [quantitative liquidity criterion 1]	LIS, notional value of a trade
Current value	10	10,000,000	500,000

1) Exclusion of price from the calculation of IL and LIS thresholds

Importantly, the inclusion of price in the calculation of LIS and IL threshold values can lead to misinterpretations and indeed confusion when measuring liquidity in instruments that are not natively defined in notional value. This can result in situations like the following:

a) Price movements occuring in the same direction as changes in liquidity exaggerate the liquidity changes;
b) Price movements which occur in the opposite direction mute the change in liquidity; and
c) Price movements without a change in liquidity make liquidity appear more volatile than it actually is.

Liquidity should therefore not be measured by using the notional value of transactions. Applying notional value as per, for example, the ADNA (Average Daily Notional Amount) across all asset classes is likely to introduce a significant amount of 'noise' to an analysis of market liquidity. Moreover, market players typically hedge their production and consumption in trading in lots and not in notional value.

Thus, **we recommend that any liquidity analysis is normalised to a base quantity unit that is native to the asset class.** For commodities, this will typically be a specific unit of measure (e.g. barrels, tons, MW, etc.).

2) Sufficiently high daily number of trades for a market to be liquid

In order for a market to be considered liquid, a sufficiently high number of trades should be executed on each trading day. **We recommend that the threshold should be set at the median of 100 transactions per day instead of the current average of 10.** Considering the fact that liquidity is the

ability to find a counterparty in a relatively short period of time within a given trading day, a threshold of 100 trades per day has the practical implication that it represents an average of approximately 1 trade every 5 minutes on an 8-hour trading day. In contrast, a threshold of 10 trades represents just 1.25 trades per hour. Given that trading is rarely uniformly distributed throughout the day, the higher threshold is a better basis for determining liquidity.

For the same reason, **a median is proposed as the minimum instead of a mean**. The mean can simply be an alternate view of the sum count of trades per year.

3) Trade frequency and standard size rather than volume as liquidity indicators

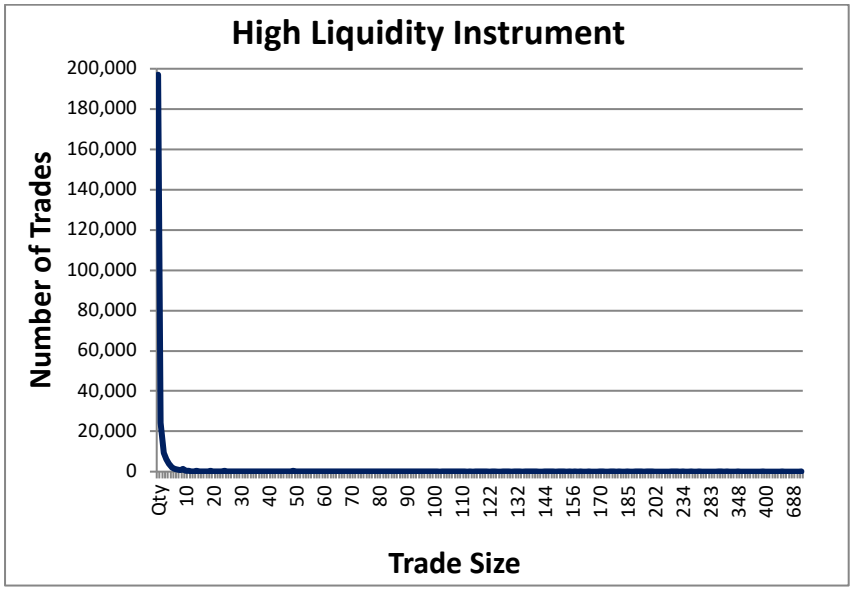
Consider two instruments: Instrument 1 is traded on average once per day for 100,000 units and Instrument 2 is traded on average 10,000 times per day for 10 units. In both cases, the average volume will be 100,000 units per day. However, it would be very difficult to categorise Instrument 1 as liquid, whereas Instrument 2 can be considered to be very liquid for trade volumes of approximately 10 units. **We therefore recommend that trade frequency and standard size, excluding unrelated vectors such as price and currency, are both measured in order to determine liquidity.**

4) Counterintuitive effects of a percentile-based approach

A percentile-based approach can lead to significant counterintuitive effects, which is important to keep in mind when setting LIS thresholds. We would like to illustrate this in the following:

Figure 1 represents the distribution of trade quantities in a highly liquid instrument.

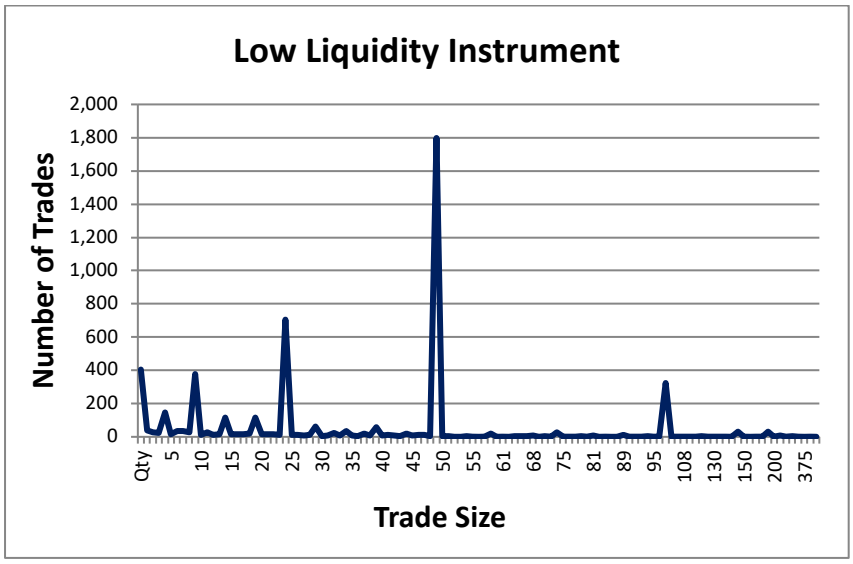
Figure 1: Distribution of trade quantities in a highly liquid instrument



Source: ICE, 2018.

Figure 2 is a similar chart for an instrument that exceeds 100 trades per day but has significantly lower liquidity.

Figure 2: Distribution of trade quantities in a low liquidity instrument



**Note: the number of trades is measured over a defined interval, in this case from 01.01.2018 to 17.05.2018. Source: ICE, 2018.*

Explanation: while the low-liquidity instrument in Figure 2 is showing the beginnings of developing liquidity in lower trade sizes as evident from the local spike at a quantity of 1, some metric specific to this instrument is still driving the trade sizes in increments of 5 unit multiples with specific drivers around the 50 level, whereas such drivers are no longer the main determinant of trade size in the high liquidity market in Figure 1.

Table 2 shows the basic statistics of the two instruments described above:

Table 2: Basic statistics of a high liquidity instrument and a low liquidity instrument

Liquidity	Mean	Median	Mode	Standard Deviation	Mode Trade Size as a percentage of Total Trades
High	2.59	1	1	12.01	77.66%
Low	39.61	40	50	36.12	36.02%

Any approach similar to the existing one using a central or percentile-based measure applied equally to these two examples will result in:

a) A low standard size for the high liquidity instrument;
b) A high standard size for the low liquidity instrument;
c) A low LIS for the high liquidity instrument (the 70th percentile is still 1 unit);
d) A high LIS for the low liquidity instrument (the 70th percentile is 50 units by trade and 72 units by volume).

The above results are counterintuitive and imply that the instrument with lower liquidity can support higher LIS levels than the high-liquidity instrument – when in fact the opposite is true. While the low liquidity instrument does typically trade in a higher size, the overall size of this market and trade

frequency is dwarfed by the higher liquidity of the market. Therefore, setting a low LIS for high liquidity markets and a high LIS for low liquidity markets based on the standard trade size in either mean, median or mode terms is detrimental for the development of low liquidity markets. **There is indeed a clear need for multiple approaches or a scaled approach based on variations in distribution.**

5) Decreased LIS threshold floor

For many commodity markets, the minimum threshold of 500,000 EUR is too high and should be decreased significantly. When looking at the LIS thresholds provided by ESMA, we see that most of the over 60 % are set at the threshold floor. Setting a threshold floor of 500,000 EUR will in some cases be above the range in trade value we have observed for the period 2016-2017 in our products. By looking specifically into the range of trade values for Nordic electricity products, for example, we see that a threshold of 500,000 EUR in many cases lies above the 99th percentile.

The table below demonstrates that, when translated into lots, particularly for the smaller contracts (e.g. ENO Day Futures) it becomes apparent that the most frequently traded lot size does not come anywhere close to the current LIS value.

Table 3: Most frequently traded lot size and current LIS values – Nordic electricity market

Most frequently traded lot (mode) size in MW				**Hours (approx..)**	**Current LIS values - lots in MW**	**Difference between current LIS values and most frequently traded lot size in MW**
	All	On book	Off book			
ENO Day	25.00	25.00	50.00	24	712	687
ENO Week	17.50	10.00	25.00	168	102	85
ENO Month	7.50	5.00	10.00	744	26	19
ENO Quarter	3.00	1.00	5.00	2,190	8	5
ENO Year	1.00	1.00	1.00	8,760	2	1

Note: The most frequently traded lot size (mode) in MW is measured over a two-year period, in this case from 1.1.2016 to 31.12.2017. Source: Nasdaq, 2018.

By bringing the LIS value more closely in line with the actual market, the overall negative market impact should be reduced.

2. Re-calibrating the LIS and IL waiver thresholds for energy derivatives

Europex appreciates that while working on a revised methodology for calculating pre-trade transparency thresholds in line with the key principles set out above, ESMA may choose to introduce an interim 'quick-fix' solution, thereby allowing exchanges to implement RTS 2 requirements as soon as possible. In this context, we would like to propose the below revised thresholds that should reduce the detrimental impact of RTS 2 on the ability of energy market participants to use regulated platforms to hedge their risk exposures.

For the avoidance of doubt, please note that **the below proposals of the revised thresholds have been based on the assumption that for the bucket grouping according to time to delivery each financial instrument (e.g. Phelix Monthly Futures) is considered individually for the purpose of the calculation**. For example, the July 18 expiry in the Phelix Monthly Futures would not be placed in one maturity bucket with other futures products with the same underlying, e.g. the Second Week July 18 Phelix Weekly Futures. Any other way of conducting these calculations would inevitably produce inaccurate outcomes in terms of liquidity profiles of the instruments in question.

Furthermore, **the proposal should be adopted in its entirety**. It should be understood as a combination of thresholds that cannot be detached from each other.

Table 4: Proposed revised threshold values for energy commodity derivatives

	IL waiver (Table 7.1, Annex III, RTS 2)		**LIS waiver (Table 7.2, Annex III, RTS 2)**	
	Average daily number of trades	**Average daily notional amount (ADNA)**	**LIS percentile**	**LIS, notional value of a trade**
Current value	10	10,000,000	70	500,000
Proposal	**100**	**100,000,000**	**30**	**50,000**

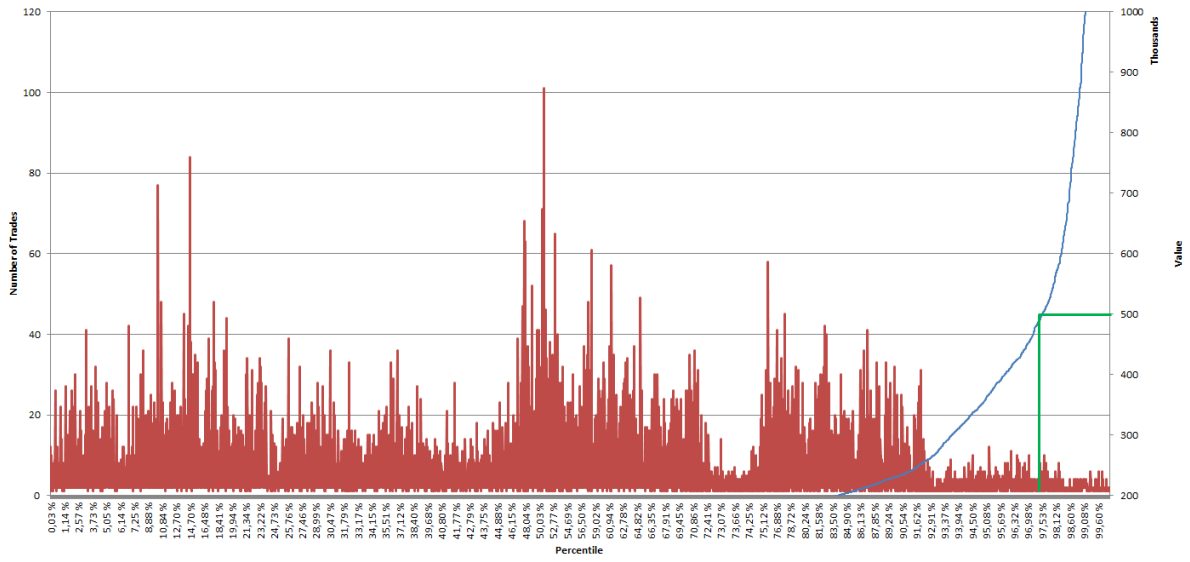
	IL waiver (Table 13.1, Annex III, RTS 2)		**LIS (Table 13.2, Annex III, RTS 2)**	
	Average daily number of trades	**Average daily amount (ADA)**	**LIS percentile**	**LIS, notional value per trade**
Current value	5	**150,000** tons of CO_2 equivalent	70	EUA as underlying **50,000** tons / other underlying: **25,000** tons
Proposal	**100**	**150,000**	**30**	**50,000/25,000**

For example: looking at the Nasdaq Nordic Electricity Monthly Futures Bucket 2 which would be deemed liquid under the current threshold of 10 trades and 10,000,000 EUR, and assumedly also under the proposed threshold of 100 trades and 100,000,000 EUR depending on the development of prices: a threshold floor of 500,000 EUR would fall at the 97th percentile, thereby putting in jeopardy

the ability of market participants to hedge their exposures. This clearly proves that the LIS threshold floor is set far too high when a product becomes liquid.

To illustrate this, please see the chart below where the green line marks the current LIS floor:

*Figure 3: Determining the LIS floor**



Explanation: the red columns show the number of trades (left Y-axis) at each percentile. The blue line shows the trade value in thousands (right Y-axis) at each percentile. The green line marks the current LIS floor of 500,000 EUR (right Y-axis) and marks the current LIS floor percentile. This value stipulates 97.5% on the X-axis. The percentile is measured by sorting all trades in the period by trade value.

**Note: the number of trades and the notional values are measured over a defined interval, in this case from 1.1.2017 to 31.12.2017. The monthly contracts are compiled in maturity bucket 2, representing 1 month < time to maturity ≤ 1 year.*

About

Europex is a not-for-profit association of European energy exchanges with 26 members. It represents the interests of exchange-based wholesale electricity, gas and environmental markets, focuses on developments of the European regulatory framework for wholesale energy trading and provides a discussion platform at European level.

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