European Securities and Markets Authority

Date: 20 December 2022
ESMA70-55-12400

OPINION on position limits on ICE Endex Dutch TTF Gas contracts

I. Introduction and legal basis

1. Article 57(1) of Directive 2014/65/EU on markets in financial instruments (MiFID II)[1] foresees that a commodity derivative other than an agricultural commodity derivative qualifies as a critical or significant commodity derivative when the size of the net open interest is at minimum of 300,000 lots on average over a one-year period. Critical or significant commodity derivatives are subject to position limits.

2. On 16 November 2022, the European Securities and Markets Authority (ESMA) considered that sufficient information was received to assess a notification received from the Netherlands Authority for the Financial Markets (AFM) under Article 57(5) of MiFID II. The notification is regarding the exact position limits the AFM intends to set for the ICE Endex Dutch Title Transfer Facility (TTF) Gas futures and options commodity contracts in accordance with the methodology for calculation established in Commission Delegated Regulation (EU) 2022/1302 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the application of position limits to commodity derivatives and procedures for applying for exemptions from position limits[2] ("RTS 21a") and taking into account the factors referred to in Article 57(3) of MiFID II.

3. ESMA's competence to deliver an opinion is based on Article 57(5) of MiFID II. In accordance with Article 44(1) of Regulation (EU) 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority)[3] ("ESMA Regulation"), the Board of Supervisors has adopted this opinion.

4. On 24 June 2021, ESMA issued an Opinion regarding the exact position limits the AFM intended to set for the ICE Endex Dutch TTF Gas futures and options commodity contracts. The position limits considered by the AFM was 54,933,660 MWh for the spot month limit and 312,337,870 MWh for the other months' limit. In this opinion, ESMA concluded that the position limits considered by the AFM complied with the methodology established in RTS 21 and were consistent with the objectives of Article 57 of MiFID II.

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[1] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349).
[2] Commission Delegated Regulation (EU) 2022/1302 of 20 April 2022 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the application of position limits to commodity derivatives and procedures for applying for exemption from position limits (OJ L 197, 26.07.2022, p.52)
[3] Regulation (EU) 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC (OJ L 331, 15. 12.2010, p. 84).

5. In this new opinion, ESMA is assessing whether the new position limits the AFM intends to set for the ICE Endex Dutch TTF Gas futures and options commodity contracts comply with the methodology established in RTS 21a and are consistent with the objectives of Article 57 of MiFID II.

II. Contract classification

Commodity base product: energy (NRGY)

Commodity sub product: natural gas (NGAS)

Commodity further sub product: TTF (TTFG)

Name of trading venue: ICE ENDEX DERIVATIVES B.V.

MIC: NDEX

Venue product codes: TFM, TFE[4]

III. Market description

6. Natural gas is a hydrocarbon gas mixture consisting largely of methane and other hydrocarbons, occurring naturally underground (often in association with petroleum). It is used as a source of energy for heating, cooking, electricity generation, fuel for vehicles and chemical feedstock in the manufacture of plastics and other organic chemicals.

7. Natural gas is usually processed to remove impurities and meet the specifications of marketable natural gas. The resulting by-products include ethane, propane, butanes, pentanes, and higher molecular weight hydrocarbons, hydrogen sulphide, carbon dioxide, water vapour, and sometimes helium and nitrogen.

8. The fundamentals of the gas markets are based on the supply and demand of gas in Europe. On the supply side, the key drivers are the availability of gas production, transportation and storage (pipelines maintenances or outages). On the demand side, the consumption is mainly driven by the weather (heating needs) and by the production of power through natural gas with the use of the combined cycle power plant technology.

9. The Dutch wholesale market for natural gas is also known as the Title Transfer Facility or TTF. It is a virtual marketplace operated by Gasunie Transport Services (GTS). The TTF was established in 2003 to promote the trading of natural gas thereby enhancing the liquidity of the Dutch natural gas market. Since then, gas trading on the TTF has increased significantly to around 47,705 terawatt hours (TWh) in 2021, making the Dutch hub the largest natural gas

[4] This is the primary venue product code (VPC) for this contract, however, the position limits set apply to other associated VPCs as well. For a complete and updated list of VPCs to which the same limit applies, please check the AFM website (https://www.afm.nl/en/professionals/onderwerpen/mifid-2/grondstofderivaten-emissierechten-positielimieten)

market in continental Europe. Today, 513 companies are registered for trading on TTF, with a maximum of 175 in one day. The volume of gas traded using TTF is such that it has become a benchmark hub for gas prices in Europe.

10. The Netherlands is one of the largest natural gas producers in the EU. However, domestic gas production from the Groningen field was wound down further in 2021. From gas year 2022-2023, the Groningen field production will be reduced to a 'pilot flame' level, the level needed to cope with contingency situations or extreme cold. At the same time, the conversion programmes to high-calorific gas for households consumption in neighbouring countries to reduce their demand for Dutch low calorific gas are proceeding according to plan[5]. As a consequence, exports are falling by an average of 2 to 3 bcm (20- 30 TWh) per year and will be virtually zero by the end of this decade. The domestic consumption of natural gas has fluctuated between 40 and 46 billion cubic meters per year over the last decade.

11. Recent developments have impacted the natural gas supply market. The year 2021 was already marked by a shortage in the natural gas market as a result of increasing gas demand and limited additional supply, which was exacerbated at the end of the year by geopolitical tensions. In particular, the low fill level at the gas storage facilities at the start of winter 2021 gave rise to concern and has caused gas prices to rise to historically high levels in the last quarter of 2021.

12. Russia's invasion of Ukraine led to significant disruptions of natural gas supply, contributing to a 60 percent drop in Russian gas deliveries since June 2022. European countries are being asked to curb their consumption of natural gas by at least 15% until spring 2023, as part of a wider plan to deal with reduced supplies from Russia.

13. The electricity market in the Netherlands has been dominated by gas-fired generation. Developments in the functioning of the wholesale market for natural gas can have a trickle-down effect on the Dutch electricity market.

14. ICE futures contracts are for physical delivery through the transfer of rights in respect of TTF. Trading will cease, at the close of business, two business days prior to the first calendar day of the delivery month, quarter, season, or calendar. Delivery is made equally each hour throughout the delivery period. It is worth noting that around 50% of all TTF-gas future contracts is being held until maturity, which results in physical gas delivery.

15. The TTF futures contract is available for trading in different amounts of monthly strips, up to eight consecutive years. One futures contract sharing the same Venue Product Code TFM (Dutch TTF Gas Futures) has 107 monthly, 11 quarters, 11 seasons and up to 8 consecutive years listed for trading. ICE also offers trading in options on these futures contracts, also booked as monthly strips.

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[5] https://www.gasunietransportservices.nl/en/news/gasunie-transport-services-bv-has-published-its-annual-report-for-the-2021-financial-year

16. The Dutch TTF Gas Base Load TAS[6] has maturities of up to 3 consecutive months contracts. The Dutch TTF Gas Daily Futures are composed of daily strips (day ahead, balance of week, weekend, Saturday, Sunday, working days next week and balance of month ("balmo") contracts). Up to 92 consecutive days and up to two months contracts can be traded.

17. A balmo is a future contract taken out on any day of the spot month and is settled on the last trading day of that month. The balmo shares contract specifications with the whole month contract (the principal) and is priced off the same underlying.

18. Position limits apply to the Dutch TTF Gas commodity contracts based on monthly strips as well as to those contracts based on daily strips. Those contracts are based on identical core (underlying) contractual specifications, terms and conditions.

IV. Proposed limit and rationale

Spot month position limit

19. Deliverable supply amounts to 171,101,100 MWh.

20. Deliverable supply is expressed in megawatt hours (MWh) as the contracts available for trading, and covered by this limit, have different lot sizes. Deliverable supply is calculated by adding the Netherlands' own gas production capacity, interconnectors and imports (including LNG), as well as gas storage for which the relevant withdrawal rate is taken into account.

21. Russia's unprovoked invasion of Ukraine has significantly changed the dynamics of the global gas supply as Russia, which was one of the main exporters of fossil fuels to the EU, has suspended natural gas delivery. This points to a scenario of full disruption of Russian gas supplies, including LNG, with no reason to assume that the situation may change soon.

22. In order to capture the decrease of Russian supply of natural gas to the EU, for interconnectors and imports, the calculation of deliverable supply is based on the physical flows observed over the 12-month reference period rather than on technical capacities.

23. As regards interconnectors, the average volume of gas that has flowed to the Netherlands through pipelines over the reference period has been taken into account. With respect to imports of LNG, Russian LNG has been excluded from the calculation of deliverable supply.

[6] Trading at Settlement, which allows a trader to enter an order to buy or sell an eligible ICE Endex TTF Gas Futures contract during the course of the trading day at a price that will be equal to the settlement price for a specific contract month.

24. The deliverable supply was estimated based on the data provided by Eurostat, ENTSO-G[7] and GIE[8]. It is composed of the following values and the time-period considered for the calculation is 1 July 2021 – 30 June 2022:

1) Internal production = 618 GWh/d[9] ;

2) Storage facilities = 3,642.37 GWh/d (2,708.51 GWh/d Dutch gas storages and 933.86 GWh/d German gas storages)[10]

3) Interconnectors - entry pipeline = 475 GWh/d[11]

4) Imports = 968 GWh/d[12] (LNG=290 GWh/d and 678 GWh/d imports from Norway and Denmark).

25. The above sums to 5,703.37 GWh/d. Deliverable supply is expressed in MWh and calculated per month. Therefore, considering that 1 month is in average 720 hours (24hr x 30 days), the total deliverable supply in MWh is: (5,703.37/24)*1000) = 237,640.41 MW x 720 hours = 171,101,100 MWh.

<u>Spot month limit</u>

26. The spot month limit is set at 17,110,110 MWh, which represents 10% of the deliverable supply. This limit applies to Dutch TTF Gas Base Load TAS, Dutch TTF Gas Daily Futures, Dutch TTF Gas Futures and Dutch TTF Gas Options.

<u>Spot month limit rationale</u>

27. In accordance with Article 11(1) of RTS 21a, the baseline for the spot month limit amounts to 25% of the deliverable supply. A standard range between 5% and 35% of the deliverable supply can be used for setting the spot month limit.

28. The AFM has considered the following factors relevant for adjusting downwards the baseline in accordance with:

- Article 18 of RTS 21a, as the Dutch TTF gas can be used as underlying for other commodity derivative contracts.

- Article 21(1) and more specifically 21(2)(b) and 21(2)(e) of RTS 21a, to reflect current constraints in the method of transportation and delivery of natural gas, and the

[7] European Network of Transmission System Operators for Gas.
[8] Gas Infrastructure Europe.
[9] Source: Eurostat: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_cb_gasm&lang=en
[10] Source: https://agsi.gie.eu
[11] Source: https://transparency.entsog.eu/#/map
[12] Source: https://ec.europa.eu/eurostat

macroeconomic or other related factors that influence the operation of the underlying commodity market including the delivery, storage, and settlement of the commodity.

29. All the other potential adjustment factors set out in RTS 21a have been considered by the AFM and were not regarded as material or relevant to require additional adjustments from the baseline.

30. Based on the above, the AFM considered that it was appropriate to set the spot month' limit at 10% of the deliverable supply representing 17,110,110 MWh.

Other months' position limit

Open interest

31. The daily average open interest over the period 1 October 2021 - 30 September 2022 for the Dutch TTF aggregated Gas contracts is 1,013,320,614 MWh. The overall open interest has decreased by around 50% since the Russia's invasion of Ukraine (i.e. March 2022 up to September 2022), compared to pre-war levels.

32. For the Dutch TTF Gas market, the related contracts that fit the aggregation criteria of identical settlement and delivery terms are: Dutch TTF Gas Base Load TAS (Trading at Settlement), Dutch TTF Gas Daily Futures, Dutch TTF Gas Futures, and Dutch TTF Gas Options.

33. The daily average open interest figures are extracted from the AFM's position reporting system. The daily average open interest is calculated by adding the open interest from each identified related contract that can be aggregated. The resulting figure is the daily open interest of the relevant contract for the selected publication date. A daily overview of the contract open interest was made by repeating this process for each publication date from 1 October 2021 until 30 September 2022. Then an average was calculated resulting in the daily open interest figure based on a year, using the definitions as detailed in RTS 21a and the ESMA Questions and Answers on MiFID II and MiFIR commodity derivatives topics.

Other months' position limit

34. The other months limit is set at 101,332,061 MWh, which represents 10% of the overall open interest. This limit applies to Dutch TTF Gas Base Load TAS, Dutch TTF Gas Daily Futures, Dutch TTF Gas Futures and Dutch TTF Gas Options.

Other months' position limit rationale

35. In accordance with Article 13(1) of RTS 21a, the baseline figure for the other months' limit amounts to 25% of the open interest. A standard range between 5% and 35% of the open interest can be used for setting the other months' limit.

36. The AFM has considered relevant to adjust the baseline downwards in accordance with:

- Article 18 of RTS 21a, as the Dutch TTF gas can be used as underlying for other commodity derivative contracts;

- Article 19(1) of RTS 21a, as there is a large volume of overall open interest;

- Article 19(2) of RTS 21a, as the overall open interest is significantly higher than the deliverable supply (roughly 6 times the deliverable supply);

- Article 21(1) and more specifically 21(2)(e) of RTS 21a, to reflect macroeconomic or other related factors that influence the operation of the underlying commodity market including the delivery, storage, and settlement of the commodity.

37. All the other potential adjustment factors set out in RTS 21a have been considered by the AFM and were not regarded as material or relevant to require additional adjustments from the baseline.

38. Based on the above, the AFM considered that it was appropriate to set the other months' limit at 10% of the overall open interest which amount to 101,332,061 MWh.

V. ESMA's Assessment

39. This Opinion concerns positions held in Dutch TTF Gas Base Load TAS, Dutch TTF Gas Daily Futures, Dutch TTF Gas Futures and Dutch TTF Gas Options.

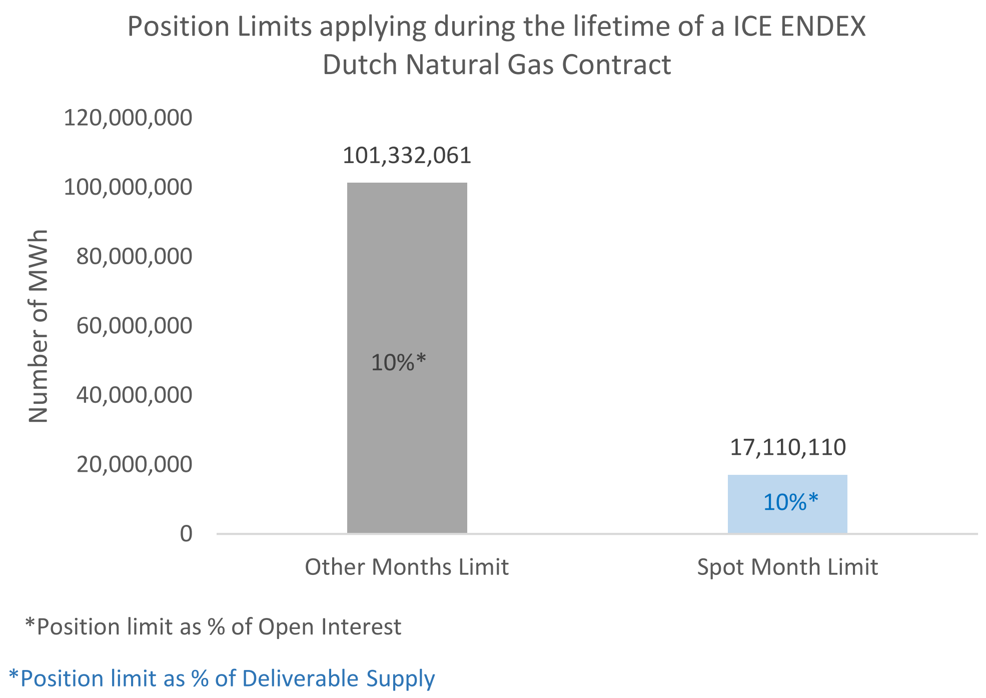
40. ESMA has performed the assessment based on the information provided by the AFM.

41. For the purposes of this Opinion, ESMA has assessed the compatibility of the new position limits the AFM intends to set according to Article 57(4) of MiFID II with the objectives of Article 57(1) of MiFID II and with the methodology for calculation of position limits established in RTS 21a, in accordance with Article 57(3) of MiFID II.

42. The overall open interest in the Dutch TTF gas contracts for the contract amounts to 1,013,320,614 MWh which translates into 1,407,389 lots. In line with Article 57(1) of MiFID II, since the level of open interest exceeds 300,000 lots over a one-year period, the ICE Endex Dutch TTF gas contracts qualify as critical or significant under Article 57(1) of MiFID II and are subject to position limits. The spot month and the other months' limits can be set between 5% and 35% of the reference amount in accordance with Article 16 of RTS 21a.

Compatibility with the methodology for calculation of position limits established in RTS 21a in accordance with Article 57(3) of MiFID II

43. The AFM has set one position limit for the spot month and one position limit for the other months.



<u>Spot month position limit</u>

44. The estimation of deliverable supply for natural gas is calculated by aggregating Dutch gas local production, the relevant imports and transmission from neighbouring countries, LNG imports and the average withdrawal rate from storage facilities. The figures used are provided by Eurostat, ENTSO-G and GIE. ESMA agrees with using data from those data-sources to calculate deliverable supply, as this ensures publicly available figures consistent at the European level.

45. Russia's invasion of Ukraine has highly impacted EU energy markets and led to a significant disruption of Russian natural gas supplies to the EU. In this context, ESMA considers it is appropriate to take into account the average physical gas flows for imports and interconnectors observed over the last 12 months for the calculation of deliverable supply rather than relying on technical imports and on transmission capacities which may not reflect the changes in the gas market supply resulting from recent geopolitical developments. ESMA also considers it is appropriate to exclude Russian LNG from the calculation of the imports considering the uncertainty governing the continued delivery of Russian LNG gas to the EU in the future.

46. ESMA notes that the calculation of available gas in storage includes the withdrawal rate from storages located in Germany that are directly and solely connected to the Dutch grid. ESMA agrees that adding to the total storage capacity the withdrawal rates figures from German storages provides an adequate representation of natural gas in storage. Furthermore, ESMA agrees with using a figure that corresponds to the minimum out of the German storage withdrawal rate and border interconnector capacity.

47. ESMA considers that the deliverable supply calculation's methodology is consistent with Article 12(2) of RTS 21a that sets out that "Competent authorities shall determine the deliverable supply (…) by reference to the average monthly amount of the underlying commodity available for delivery based on the most recent available data covering: (a) a one-year period immediately preceding the determination for a critical or significant commodity derivative; (b) a one to five-year period immediately preceding the determination for an agricultural commodity derivative.

48. ESMA agrees that a downward adjustment to the baseline is justified under Article 18 of RTS 21a due to the fact that the deliverable supply is also used as deliverable supply for other commodity derivatives.

49. ESMA also considers that it is a reasonable approach to have further adjusted the spot month limit downwards to take into account existing constraints in the method of transportation and delivery of natural gas in accordance with Article 21(2)(b) as well as the macroeconomic or other related factors that influence the operation of the underlying commodity market including the delivery, storage, and settlement of the commodity, in accordance with Article 21(2)(e) of RTS 21a.

<u>Other months' position limit</u>

50. The open interest has been calculated by the AFM extracting figures from the position reporting system. The daily average open interest has been calculated adding the open interest from each identified related contract that can be aggregated. ESMA considers such aggregation sensible, as the contracts will be covered by the same limits. The daily average open interest has been calculated over one year, from 1 October 2021 until 30 September 2022. ESMA considers that such calculation of open interest by the competent authority provides the most accurate and reliable figure and promotes convergence in the setting of position limits by competent authorities. ESMA also considers such approach consistent with Article 14 of RTS 21a.

51. ESMA agrees with the downward adjustment made to the baseline in accordance with Article 18 of RTS 21a as that the deliverable supply in the underlying commodity is also used as deliverable supply for other commodity derivatives, in accordance with Article 19(1) of RTS 21a as there is a large volume of overall open interest and in accordance with Article 19(2) of RTS 21a as the open interest is significantly higher than deliverable supply.

52. ESMA also considers that an additional downward adjustment is justified to reflect the macroeconomic or other related factors that influence the operation of the underlying commodity market including the delivery, storage, and settlement of the commodity, in accordance with Article 21(2)(e) of RTS 21a.

53. Consequently, these position limits have been set following the methodology established by RTS 21a.

Compatibility with the objectives of Article 57(1) of MiFID II

54. ESMA has found no evidence indicating that the proposed position limits are not consistent with the objectives of preventing market abuse and supporting orderly pricing and settlement conditions established in Article 57(1) MiFID II.

55. Overall, the position limits set for the spot month and the other months appear to achieve a reasonable balance between the need to prevent market abuse and to ensure an orderly market and orderly settlement, while ensuring that the development of commercial activities in the underlying market and the liquidity of the Dutch TTF Gas commodity contracts are not hampered.

56. ESMA however notes that setting position limits in the uncertain geopolitical environment created by the Russian invasion of Ukraine and Russia's decision to significantly reduce delivery of natural gas to the EU may prove challenging, especially in relation to the calculation of deliverable supply. ESMA also notes that the Dutch TTF Gas contracts may be impacted by the measures that may potentially be taken by the Council and the European Commission regarding the operation of the EU energy spot and derivatives markets.

57. ESMA therefore invites the AFM to closely monitor developments in the Dutch TTF contract and to assess on an-ongoing basis the relevance of the data underpinning the position limits. In case of any relevant changes in market fundamentals, including the calculation of deliverable supply or open interest, the AFM should notify ESMA of the revised position limits as soon as possible.

VI. Conclusion

58. Based on all the considerations and analysis presented above, it is ESMA's opinion that the spot month position limit complies with the methodology established in RTS 21a and is consistent with the objectives of Article 57 of MiFID II. The other months' position limit also complies with the methodology established in RTS 21a and is consistent with the objectives of Article 57 of MiFID II.

Done at Paris,

Verena Ross

Chair

For the Board of Supervisors