

OPINION on position limits on ICE Endex and EEX 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 a minimum 300,000 lots on average over a one-year period. Critical or significant commodity derivatives are subject to position limits.
2. Pursuant to Article 57(6) of MiFID II, where critical or significant commodity derivatives based on the same underlying and sharing the same characteristics are traded on trading venues in more than one jurisdiction, the competent authority of the trading venue where the largest volume of trading takes place ('central competent authority') shall set the single position limit to be applied on all trading in those derivatives.
3. Dutch Title Transfer Facility (TTF) gas contracts are traded on ICE Endex and on the European Energy Exchange (EEX). The ICE Endex contracts and the EEX contracts both qualify as significant under Article 57(1) of MiFID II, are based on the same underlying and share the same characteristics as set by Article 57 (6) MiFID II. The largest volume of trading takes place on ICE Endex. In accordance with Article 57(6) of MiFID II, the Netherlands Authority for the Financial Markets (AFM) is therefore the central competent authority (CCA) responsible for setting the single position limit for the Dutch TTF gas contracts.
4. On 30 May 2024, the European Securities and Markets Authority (ESMA) considered that sufficient information was received to assess a notification from the AFM under Article 57(5) of MiFID II. The notification is regarding the exact position limits the AFM, after having consulted the German Federal Financial Supervisory Authority (BaFin), intends to set in its capacity as CCA for the ICE Endex and the EEX Dutch TTF Gas futures and options commodity contracts. The AFM thereby acts 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

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).

exemptions from position limits² (“RTS 21a”) and taking into account the factors referred to in Article 57(3) of MiFID II.

5. 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”), ESMA has adopted this opinion.
6. In this opinion, ESMA is assessing whether the position limits the AFM intends to set in its capacity as CCA for the ICE Endex and EEX 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 venues: ICE ENDEX DERIVATIVES B.V., EUROPEAN ENERGY ECHANGE

MIC: NDEX, XEEE

Venue product codes: TFM, TFE⁴, G3B

III. Market description

7. 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.
8. 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,

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).

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>)

and higher molecular weight hydrocarbons, hydrogen sulphide, carbon dioxide, water vapour, and sometimes helium and nitrogen.

9. 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.
10. 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 38,356 terawatt hours (TWh) in 2022, making the Dutch hub the largest natural gas market in continental Europe. Today, 414 companies are registered for trading on TTF. The volume of gas traded using TTF is such that it has become a benchmark hub for gas prices in Europe.
11. 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 during 2022 and 2023. From 1 October 2023, the Groningen field production is reduced to a 'pilot flame' level, the level needed to cope with contingency situations or extreme cold. The domestic consumption of natural gas has fluctuated between 40 and 46 billion cubic meters per year over the last decade. However, the consumption of gas has decreased by 17.7% in the period August 2022 - March 2023, compared with the average gas consumption for the same months (August - March) between 2017 and 2022.
12. Since Russia's invasion of Ukraine in 2022 which led to disruptions to natural gas supply in the EU, six Liquefied Natural Gas (LNG) terminals have come into operation across Europe and one existing terminal in France has been expanded, totalling 36.5 billion cubic meters (bcm) of new LNG regasification capacity. In the Netherlands, the EemsEnergyTerminal has been operational since 15 September 2022.
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. For a given trading day, ICE Endex lists TTF futures contracts for the next 114 months, the next 38 quarters, the next 18 seasons and the next 9 calendar years. Additionally, ICE

Endex lists options on TTF futures contracts for the next 54 months, the next 18 quarters, the next 8 seasons and the next 4 calendar years.⁵

15. EEX TTF futures contracts are also for physical delivery. For a given trading day, EEX lists TTF derivative contracts for the next 12 months, the next 11 quarters, the next 11 seasons and the next 6 calendar years. Additionally, EEX lists options on TTF monthly contracts via trade registration for the next 12 months, and bundles of 3, 6 and 12 months of the underlying, for the subsequent 34 months.

IV. Proposed limit and rationale

Spot month position limit

16. Deliverable supply amounts to 167,006,400 MWh.
17. Deliverable supply is expressed in 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.
18. The 2022 Russia's invasion of Ukraine has changed the dynamics of the global gas supply as Russia, which was one of the main exporters of fossil fuels to the EU, has drastically reduced natural gas exports.
19. 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.
20. As regards interconnectors, the average volume of gas that has flown 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.
21. The deliverable supply was estimated based on the data provided by Eurostat, ENTSO-G⁶ and GIE⁷. It is composed of the following values and the time-period considered for the calculation is 2 January 2023 – 29 December 2023:

- 1) Internal production = 371 GWh/d⁸ ;

⁵ The relatively high number of monthly contracts listed on ICE Endex can be explained by the fact that quarterly, season and yearly contracts are traded as strips of monthly futures contracts and/or monthly option contracts.

⁶ European Network of Transmission System Operators for Gas.

⁷ Gas Infrastructure Europe.

⁸ Source: [Eurostat](#)

- 2) Storage facilities = 3,645.60 GWh/d (2,795.64 GWh/d Dutch gas storages and 849.96 GWh/d German gas storages)⁹
- 3) Interconnectors - entry pipeline = 390.28 GWh/d¹⁰
- 4) Imports = 1160 GWh/d¹¹ (LNG=761 GWh/d and 399 GWh/d imports from Norway and Denmark).

22. The above sums up to 5,566.88 GWh/d. Deliverable supply is expressed in MWh and calculated per month. Therefore, considering that 1 month has on average 720 hours (24hr x 30 days), the total deliverable supply in MWh is: $(5,566.88/24)*1000 = 231,953.33 \text{ MW} \times 720 \text{ hours} = 167,006,400 \text{ MWh}$.

Spot month limit

23. The spot month limit is set at 25,050,960 MWh, which represents 15% of the deliverable supply. This limit applies to Dutch TTF Gas Base Load TAS, Dutch TTF Gas Daily Futures, Dutch TTF Gas Futures, Dutch TTF Gas Options and EEX TTF Natural Gas Futures and Options.

Spot month limit rationale

24. 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.

25. The AFM has considered the following factor relevant for adjusting downwards the baseline:

- Article 21(1) and more specifically 21(2)(b) and 21(2)(e) of RTS 21a, to reflect bottlenecks in the gas transportation and delivery system in North-Western Europe which emerged from Russia's weaponization of natural gas and the subsequent search for alternative supply.

26. 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.

27. Based on the above, the AFM considered that it was appropriate to set the spot month' limit at 15% of the deliverable supply representing 25,050,960 MWh.

⁹ Source: <https://agsi.gie.eu>

¹⁰ Source: <https://transparency.entsog.eu/#/map>

¹¹ Source: <https://ec.europa.eu/eurostat>

Other months' position limit

Open interest

28. The aggregated daily open interest average for the period 2 January 2023 – 29 December 2023 for the Dutch TTF aggregated Gas contracts is 1,224,136,392 MWh.
29. 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. On the German TTF Natural Gas market, the available contracts comprise both Future and Option contracts referring to the future physical delivery of gas into the Dutch transmission system.
30. The daily average open interest figures for ICE Endex are extracted from the AFM's position reporting system while the daily average open interest for EEX was received from BaFin. Both the AFM and BaFin have calculated open interest on a net basis. On each trading venue, the daily average open interest is calculated by aggregating and netting at position holder level the open interest in all identified related contracts on that venue. 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 2 January 2023 until 29 December 2023. 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 topics¹². The daily TTF open interest is the sum of daily open interest on ICE Endex and EEX.

Other months' position limit

31. The other months limit is set at 153,017,049 MWh, which represents 12.5% of the overall open interest. This limit applies to Dutch TTF Gas Base Load TAS, Dutch TTF Gas Daily Futures, Dutch TTF Gas Futures, Dutch TTF Gas Options and EEX TTF Natural Gas Futures and Options.

Other months' position limit rationale

32. 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.
33. The AFM has considered relevant to adjust the baseline downwards in accordance with:
- Article 19(1) of RTS 21a, as there is a large volume of overall open interest;

¹² In particular, please see the following ESMA Q&A: <https://www.esma.europa.eu/publications-data/questions-answers/1276>

- Article 19(2) of RTS 21a, as the overall open interest is significantly higher than the deliverable supply (roughly seven times the deliverable supply);
- Article 21(1) and more specifically 21(2)(b) and 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.

34. 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.

35. Based on the above, the AFM considered that it was appropriate to set the other months' limit at 12.5% of the overall open interest which amount to 153,017,049 MWh.

V. ESMA's Assessment

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

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

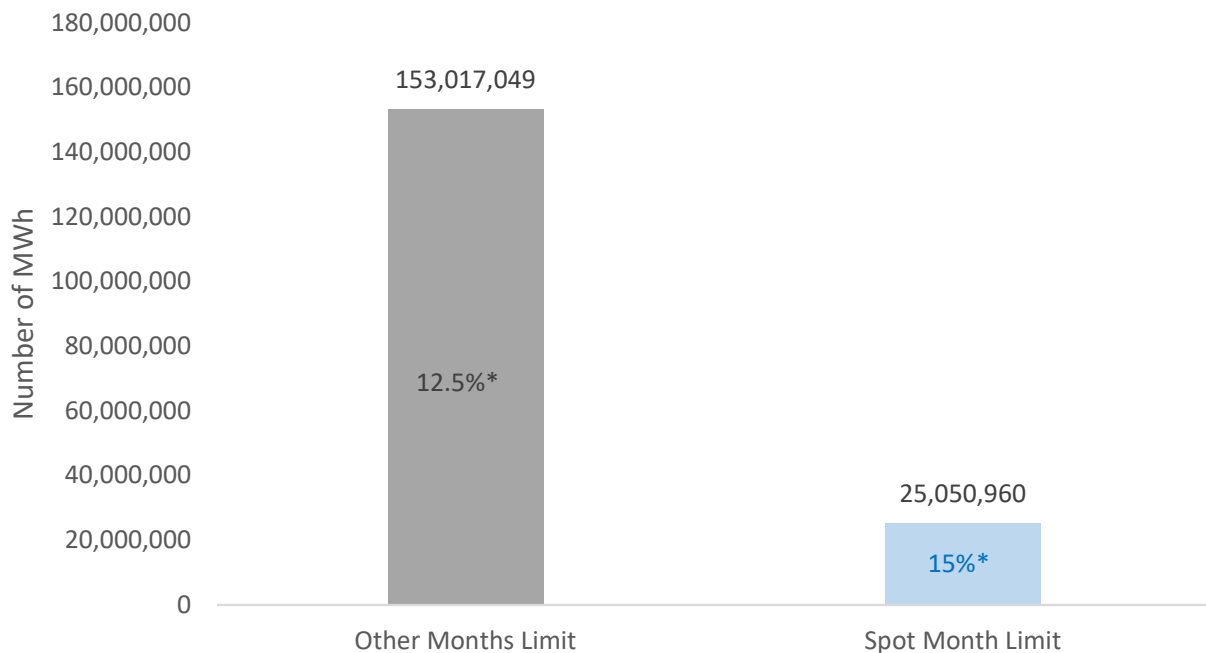
38. For the purposes of this Opinion, ESMA has assessed the compatibility of the position limits that the AFM intends to set in its capacity as CCA for the Dutch TTF gas contracts according to Article 57(4) and 57(6) of MiFID II with the objectives of Article 57(1) of MiFID II and with the methodology for calculation of position limits established in RTS 21a, in accordance with Article 57(3) of MiFID II.

39. The overall open interest in the ICE Endex Dutch TTF gas contracts over the reference period amounts to 929,239,566 MWh which translates into 1,290,610 lots whereas the overall open interest in the EEX Dutch TTF gas contracts amounts to 294,896,826 MWh which translates into 409,578 lots. Since the level of open interest in each of these commodity contracts exceeds 300,000 lots, they both qualify as critical or significant under Article 57(1) of MiFID II. As the contracts are based on the same underlying and share the same characteristics, they should be subject to the single position limit set by the CCA in accordance with Article 57 (6) of MiFID II. The single position limit for the spot month and the other months' 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

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

Position Limits applying during the lifetime of an ICE ENDEX and EEX
Dutch Natural Gas Contract



*Position limit as % of Open Interest

*Position limit as % of Deliverable Supply

Spot month position limit

41. 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.

42. Following Russia's invasion of Ukraine in 2022 and its impact on Russian natural gas supplies to the EU, ESMA considers it appropriate to continue taking 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 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.

43. 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.
44. 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."
45. In addition, ESMA agrees that a downward adjustment to the baseline is justified 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.

Other months' position limit

46. The open interest in ICE Endex TTF Gas contracts has been calculated by the AFM extracting figures from the position reporting system. The daily average open interest has been calculated on a net basis adding the open interest from each identified related contract that can be aggregated. The same methodology has been applied by BaFin for the calculation of the net average open interest in EEX TTF Gas contracts that has been shared with the AFM as the CCA. ESMA considers such aggregation sensible, as the ICE Endex and EEX contracts will be covered by the same limits. The daily average open interest has been calculated over a one-year period, from 2 January 2023 until 29 December 2023. ESMA considers that such calculation of open interest by the competent authorities provides the most accurate and reliable figure and promotes convergence in the setting of position limits. ESMA also considers such approach consistent with Article 14 of RTS 21a.
47. ESMA agrees with the downward adjustment made to the baseline 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.
48. ESMA also considers that an additional downward adjustment is justified to take into account existing constraints in the method of transportation and delivery of natural gas in accordance with Article 21(2)(b) of RTS 21a 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.

49. 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

50. 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.

51. 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.

52. Although the 2022 energy crisis has abated, notably due to the reduced dependence on Russian gas and the diversification of EU countries' supplies, ESMA notes that the geopolitical environment remains uncertain. ESMA also notes that the figures provided by the AFM and BaFin show that open interest on ICE Endex and EEX has significantly increased over the last few months.

53. ESMA therefore invites the AFM to continue closely monitoring 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

54. 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, 14 June 2024

[signed]

Verena Ross

Chair

For the Board of Supervisors