Date: 11 March 2019
ESMA70-155-6438

# OPINION on position limits on ICE ENDEX Italian PSV Gas contracts

## I. Introduction and legal basis

1. On 23 August 2018, the European Securities and Markets Authority (ESMA) received a notification from the Netherlands Authority for the Financial Markets (AFM) under Article 57(5) of Directive 2014/65/EU on markets in financial instruments[1] ("MiFID II") regarding the exact position limits AFM intends to set for Italian PSV Gas commodity contract in accordance with the methodology for calculation established in Commission Delegated Regulation (EU) 2017/591 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 in commodity derivatives[2] ("RTS 21") and taking into account the factors referred to in Article 57(3) of MiFID II.

2. 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.

## II. Contract classification

Commodity base product: energy (NERGY)

Commodity sub product: natural gas (NGAS)

Commodity further sub product: other (OTHR)

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

MIC: NDEX

Venue product code: IGA.

[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) 2017/591 of 1.12.2016 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 commodity derivatives (OJ L 87, 31.3.2017, p. 479).
[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).

## III. Market description

3. 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.

4. 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.

5. In Italy natural gas is traded on the Punto di Scambio Virtuale (PSV), the virtual trading point operated by the Transmission System Operator SNAM Rete Gas. All clients of SNAM Rete Gas who have entered into an Access Contract are eligible to trade on the PSV. Over 100 companies are registered for trading on the virtual trading hub.

6. Total gas demand in Italy fluctuates between 60 and 70 billion cubic meters (BCM) which is mostly met by imports of natural gas from Russia, Algeria, Libya and liquefied natural gas (LNG) from Qatar. The amount of natural gas traded on the PSV hub has increased in recent years and amounts to approximately 860 terawatt hours (TWh) in 2016. Gas trading is almost exclusively conducted on the OTC market. Although various exchange operators and clearing houses have started to offer their services to the Italian wholesale gas market, their market share continues to be modest in comparison to the brokered market (less than 1%).

7. The PSV is a virtual trading point for exchanging ownership rights of gas already available on the Italian gas grid. As such, all gas that is injected at the various entry points contribute to the Italian natural gas physical supply. Therefore, the respective supply of the Italian natural gas physical market related to PSV includes all supply at the various entry points of the Italian grid. The main source of gas injected in the Italian grid is from imports. The Italian grid is supplied through 7 entry points. In addition to the gas imports, within the Italian grid there are gas storages facilities from which gas in storage can be injected at their respective entry points.

8. ICE contracts are for delivery or purchase through the transfer of rights in respect of natural gas at the PSV. Delivery is made equally each day throughout the delivery period from 06:00 (CET) on the first day of the month until 06:00 (CET) on the first day of the next month. The delivery days are all the calendar days in the delivery month.

9. This contract is available for trading in different amounts of monthly strips, up to 35 consecutive month contracts. The exchange offers up to 7 consecutive quarters, where quarters are strips of three individual and consecutive contract months, and always comprise a strip of Jan-Mar, Apr-Jun, Jul- Sep or Oct-Dec. ICE also offers up to 4 consecutive seasons which are strips of six individual and consecutive contract months, and up to 2 calendar years, which are strips of twelve individual and consecutive contract months. Months, quarters, seasons and calendar years are listed in parallel.

## IV. Proposed limit and rationale

*Spot month position limit*

Deliverable supply

10. Deliverable supply amounts to 219,049,200 megawatt-hour (MWh). One MW is equivalent to one lot.

11. Deliverable supply is expressed in MWh and calculated by adding the Italian gas production capacity, imports (including LNG), as well as gas storages, taking into account the relevant withdrawal rates. Hence:

- The internal production for 2017 is 58,637,191 MWh (211,077 Terra joules, where 1 TJ = 277,8 MWh[4]) or equivalently 6,694 MW.

- Technical capacity of entry points connected to LNG terminals: the Italian grid is connected to 3 LNG terminals entry point with a technical physical capacity in 2016 of 543 GWh/d[5] or equivalently 22,625 MW.

- Technical capacity of entry points connected to interconnectors: the Italian grid has interconnectors with Austria, Libya, Switzerland, Slovenia and Algeria. The total capacity for such entry points is 3,523 GWh/d or equivalently 146,791.67 MW[6].

- Technical capacity of entry points connected to storage facilities: the Italian grid has entry points with 5 storage facilities across Italy. The supply of gas from such storage facilities, at an average withdrawal rate, adds to 128,125 MW[7].

12. The figures representing deliverable supply in Tera joule, MW, and MWh/d have been converted to MWh (on a basis of the average number of hours in a month) to match the units in which open interest is expressed. The sum of the components of deliverable supply adds to 304,235 MWh.

13. Deliverable Supply is expressed in MWh and calculated per standard month (30 days, 720 hours). Therefore, the previous is multiplied by 720 obtaining 219,049,200 MWh, which represents the total deliverable supply per month.

Spot month position limit

14. The spot month limit is set at 54,762,300 MWh, which represents 25% of deliverable supply.

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[4] http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_103m&lang=en
[5] https://www.entsog.eu/public/uploads/files/maps/systemdevelopment/ENTSOG-GIE_SYSDEV_MAP2016-2017.pdf
[6] https://www.entsog.eu/public/uploads/files/maps/systemdevelopment/ENTSOG-GIE_SYSDEV_MAP2016-2017.pdf
[7] Gas Interconnection Europe: http://www.gie.eu/index.php/maps-data/gse-storage-map

Spot month position limit rationale

15. As the daily average open interest is lower than 14,400,000 MWh (20,000 lots * 720 MWh), Italian PSV has a baseline limit of 25% and a standard range of the limit between 5% and 40% (Article 15 of RTS 21). However, given that there are no investment firms acting as market markets, according to Article 19 of RTS 21, the relevant range for position limits is between 5% and 50%.

16. When setting the spot month limit, the AFM has taken into account all the relevant factors described in RTS 21 and has not found any reason to apply adjustments to the spot month limit from the baseline.

17. In considering the volatility of the contract, as required by Article 21 of RTS 21, the AFM notices that there has been some variation in the price of the commodity derivative but the AFM has not found evidence that this is excessive or that lower position limit would reduce volatility.

18. Overall the spot month limit is set at 25% of deliverable supply which provides a figure of 54,762,300 MWh.

*Other months' position limit*

Open interest

19. Open interest amounts to 5,532,480 MWh. This open interest value was calculated as the average over three months (December 2017-February 2018) of the daily open interest of futures based on data published on the ICE Endex website Report Center[8].

Other months' position limit

20. The other months limit is set at 2,766,240 MWh which represents 50% of open interest.

Other months' position limit rationale

21. The baseline for the other months limit has been set at 25% of open interest as required by Article 11(1) of RTS 21. Under Article 19(2)(b) of RTS 21, the contract can have a position limit set between 5% and 50% as the number of investment firms acting as a market maker in accordance with Article 4(1)(7) of Directive 2014/65/EU in the commodity derivative at the time the position limit is set or reviewed is lower than 3.

22. Maturity (Article 16 of RTS 21): the Italian PSV Gas has a relative large amount of separate expiries (35 expiries of monthly contracts) in the other months contracts, hence the AFM consider this factor relevant to adjust the limit upward.

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[8] https://www.theice.com/marketdata/reports/159

23. Open interest and deliverable supply (article 18(3) of RTS 21): the highest daily OI in 2017 in the Italian PSV Gas market amounts to 3.5% of deliverable supply. Hence open interest is significantly lower than deliverable supply, and the AFM considers this factor relevant to adjust the limit upward.

24. Structure, organization and operation of the market and composition and role of market participants (Article 20 of RTS 21): The PSV contract is physically settled and market participants active in the physical gas market operate facilities with substantial generation/storage capacity or large demand of assets. Hence the AFM acknowledges the existence of naturally occurring large positions in the gas derivatives market which need to be taken into account when adjusting the limit upwards.

25. Furthermore, the AFM notices that the Italian PSV Gas market has rapidly developed from an illiquid market to a less liquid market. Therefore, in setting the other month limit the AFM takes into account the open interest development trend (during 2017 the open interest more than tripled from Q1 to Q4).

26. In considering the volatility of the contract, as required by Article 21 of RTS 21, the AFM notices that there has been some variation in the price of the commodity derivative but the AFM has not found evidence that this is excessive or that lower position limit would reduce volatility.

27. In light of the previous considerations the AFM has decided to increase the limit for the other months at 50% of open interest in order to provide for a workable position limits framework. This upward adjustment also incorporates an anticipation of a continued growing open interest in the contract and the need to avoid the risk of unduly constraining trading in this rapidly growing commodity derivative market and preventing it from being capable of accepting future demand for hedging.

## V. ESMA’s Assessment

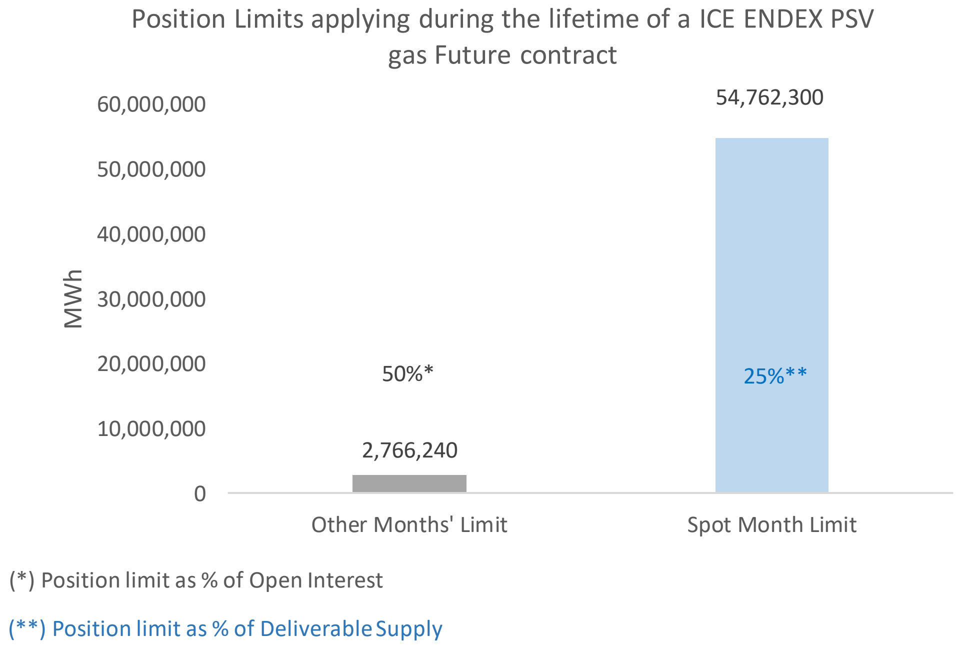
28. This Opinion concerns positions held in Italian PSV Gas futures

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

30. For the purposes of this Opinion, ESMA has assessed the compatibility of the intended position limits with the objectives of Article 57(1) of MiFID II and with the methodology for calculation of position limits established in RTS 21, in accordance with Article 57(3) of MiFID II.

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

31. The AFM has set one position limit for the whole spot month and one for the other months’.




32.

Spot month position limit

33. The estimation of deliverable supply for natural gas is calculated by aggregating Italian gas local production, the imports and transmission capacity from neighbouring countries, LNG imports and the average withdrawal rate from storage facilities.

34. ESMA considers that the deliverable supply calculation's methodology is consistent with Article 10(2) of RTS 21 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 over the one year period immediately preceding the determination".

35. Taking into account the potential adjustment factors, ESMA considers as reasonable to have set the spot month limit at the baseline.

Other months' position limit

36. The open interest was calculated as the daily average over three months of the number of open contracts that have not been closed out or expired. ESMA considers such an approach suitable as an average for a period of time gives a more stable measure of open interest and considers such approach consistent with Article 12 of RTS 21.

37. ESMA agrees that an upward adjustment from the baseline should be considered given the large number of separate expiries according to Article 16(2), and the particular characteristics of producers in a physically delivered commodity according to Article 20(2)(d) of RTS 21.

38. ESMA considers the upward adjustment to the other month limit made under Article 18 of RTS 21 as appropriate given that the open interest is significantly lower that the deliverable supply (the highest daily open interest in 2017 in the Italian PSV Gas market amounts to 3.5% of deliverable supply).

39. ESMA agrees that the other months' limit set by the competent authority is appropriate.

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

40. Under Article 57(1) of MiFID II, the objectives of the position limits are to prevent market abuse and support orderly pricing and settlement.

41. Based on the information provided by the competent authority ESMA notes that the spot month limit far exceeds the overall open interest in the PSV contract.

42. ESMA understands the need to avoid the risk of unduly constraining trading in this contract. However, there is a risk that the objectives set out in Article 57(1) of MiFID II may not be achieved where the spot month limit is well above the positions held by market participants.

43. In light of the assessment above, ESMA considers that the position limits set for the spot month and for the other months 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 power market and the liquidity of the PSV contract are not hampered.

44. However, to help ensure that the objectives set out in Article 57(1) of MiFID II are met, ESMA considers that trading patterns in PSV contracts should be carefully monitored by the competent authority, in particular during the spot month, and that the limits should be reviewed on a timely basis.

## VI. Conclusion

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

Done at Paris, 11 March 2019

Steven Maijoor

Chair

For the Board of Supervisors