



CAPACITY ALLOCATION MECHANISM NETWORK CODE

**Implementation and
Effect Monitoring Report 2018**

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PART 1



IMPLEMENTATION MONITORING REPORT OF CAM NC

2018

1 INTRODUCTION

The Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013 (CAM NC) was developed by ENTSOG (European Network of Transmission System Operators for Gas) in a process with two stages: After the European Commission (EC) submitted a request for a Framework Guideline to the Agency for the Cooperation of Energy Regulators (ACER), ENTSOG transformed the ACER Framework Guideline into the CAM NC, while conducting extensive public consultations. The 'old' CAM NC entered into force in 2013. At a later stage, the amended CAM NC has been developed which entered into force in April 2017 and repealed the first version of the CAM NC.

Article 8(8) of the Regulation (EC) 715/2009 ('Gas Regulation') requires ENTSOG to 'monitor and analyse the implementation of the network codes and the Guidelines adopted by the Commission in accordance with Article 6(11), and their effect on the harmonisation of applicable rules aimed at facilitating market integration'. Article 8(8) also requires ENTSOG to 'report its findings to the Agency and [...] include the results of the analysis in the annual report'. Under the provision of Article 8(8) of the Gas Regulation, ENTSOG monitors the implementation of the CAM NC.

ENTSOG, as required by Gas Regulation, is publishing an Annual Report to assess ENTSOG's work and achievements retrospectively for each given year. The results of this report will also be published in the ENTSOG Annual Report 2018. ENTSOG launched their annual Implementation Monitoring process in December 2018 to ensure the timely publication of the results.

This is the fourth Implementation Monitoring performed by ENTSOG covering the calendar year 2018. ENTSOG launched this monitoring exercise in December 2018 to ensure the timely publication of its results in the 2018 Annual Report. It reflects the status of implementation of 43¹⁾ European Transmission System Operators (TSOs). Almost the same questionnaire was used as in the previous years so that it could be possible to monitor which TSOs had implemented which specific Articles in the years between 2015 and 2018. The analysis for the report were focussed on the implementation status of provisions which were not implemented in the last year's report and on provisions entered into force in 2018.

Chapter 2 gives a high-level overview of all provisions which are mandatory while Chapter 3 covers those provisions more in detail which were not fully implemented yet or which entered into force in 2018.

1) Detailed information about the survey participants can be found in Chapter 1.2 and 2.1



2 OVERVIEW OF IMPLEMENTATION STATUS SURVEY

This chapter provides an overview of the implementation status of each Article of the CAM NC at TSO level. Questions were asked that focussed on the mandatory provisions for TSOs stipulated in each Article. Chapter 3 ‘TSO Survey Question-by-Question Analysis’ covers those provisions more in detail which were not fully implemented in last years’ report or which entered into force in 2018.

The presented data were collected from 46 TSOs. This report reflects the responses from 41 ENTSOG members²⁾, 2 associated partners and 3 TSOs that are not ENTSOG members. Three out of the 41 ENTSOG members are under derogation, therefore they were excluded from the scope of this monitoring exercise. Three TSOs (Baltic states) applied the implicit capacity allocation method. Where the implicit capacity allocation method is applied, national regulatory authorities may decide not to apply Articles 8 to 37 of the CAM NC, according to Article 2(5).

Table 2.1 on the following double page shows the implementation status of the mandatory CAM NC Articles by TSOs. It indicates the number of TSOs according to the following implementation status of each given Article:

- ▲ Fully Implemented: TSO has fully implemented the Article;
- ▲ Not Implemented: TSO has not fully implemented the Article;
- ▲ Not Applicable, meaning:
 - a) CAM NC is not applicable for particular IPs
 - b) Capacity was already fully booked before the CAM NC entered into force

2) ENTSOG has 44 members, three have no interconnections point in their network and are therefore excluded from CAM Implementation monitoring

CAM NC Article	Fully Implemented Number of TSOs	Not Implemented Number of TSOs	Not Applicable Number of TSOs	Comments
Chapter II: Principals of cooperation				
Art. 4 Coordination of maintenance	43	0	0	
Art. 6(1) Capacity calculation and maximisation	43	0	0	
Chapter III: Allocation of firm capacity products				
Art. 8(6) Allocation methodology	40	0	3	2 TSOs: impl. Allocation, 1 TSO: capacity fully booked
Art. 9 Standard capacity products	41	0	2	2 TSOs: impl. allocation
Art. 10 Applied capacity unit	43	0	0	
Art. 11(3) Annual yearly capacity auctions	43	0	0	
Art. 12(1) Quarterly products offered in four auctions	40	0	3	2 TSOs: impl. allocation, 1 TSO: fully booked
Chapter IV: Bundling of capacity at interconnection points				
Art. 19(1) Maximisation of bundled capacity	38	0	5	2 TSOs: impl. Allocation, 1 TSO: capacity fully booked
Art. 19(5) Bundled Capacity products	38	0	5	2 TSOs: impl. allocation
Art. 19(7) Single nomination procedure	38	1	4	2 TSOs: impl. allocation, 1 TSO: IP to third country, 1 TSO: expect to establish in 2019
Art. 19(9) Virtual Interconnection Points	13	8	22	See details at 1.3.1.3
Art. 21(3) Conversion service	39	1	3	1 TSO: not implemented, 3 TSOs: impl. allocation
Chapter V: Incremental capacity process				
Art. 22 – 31	not mandatory for 2018, 2 TSOs published DAR on a voluntary basis			

CAM NC Article	Fully Implemented Number of TSOs	Not Implemented Number of TSOs	Not Applicable Number of TSOs	Comments
Chapter VI: Interruptible capacity				
Art. 32(1) Int. cap. after firm cap. sold out	43	0	0	
Art. 32(2) Daily int. cap offered at bidirectional IP	40	0	3	3 TSOs: no daily int. capacity offer
Art. 32(2) Daily int. cap offered at unidirectional IP	33	0	10	7 TSOs: no unidirectional IP, 3 TSOs: no daily int. capacity offer
Art. 32(3) - Allocation of interruptible services	43	0	0	
Art. 32(5) Allocation of interruptible services via auctions	40	0	3	3 TSOs: impl. allocation
Art. 32(6) & (7) Allocation of within-day interruptible services (overnomination procedure)	35	5	3	5 TSOs: in progress, 2 TSOs: no within-day capacity offered, 1 TSO: impl. allocation
Art. 32(8) Allocation of interruptible services (D,M,Q,Y)	37	0	6	
Art. 33(1) joint decision on minimum interruption lead times	29	10	4	
Art. 33(2) Minimum interruption lead times	43	0	0	
Art. 34 Coordination of interruption process	43	0	0	
Art. 35(1) Defined sequence of interruptions	43	0	0	
Art. 35(2) Defined sequence of interruptions	43	0	0	
Art. 35(3) Defined sequence of interruptions	40	0	0	3 TSOs: impl. allocation
Art. 36 Reasons for interruptions	41	0	0	

Table 2.1: Survey of Implementation Status by TSOs

3 ANALYSIS OF CAM NC IMPLEMENTATION

TSO SURVEY QUESTION-BY-QUESTION ANALYSIS

3.1 STANDARD CAPACITY PRODUCTS

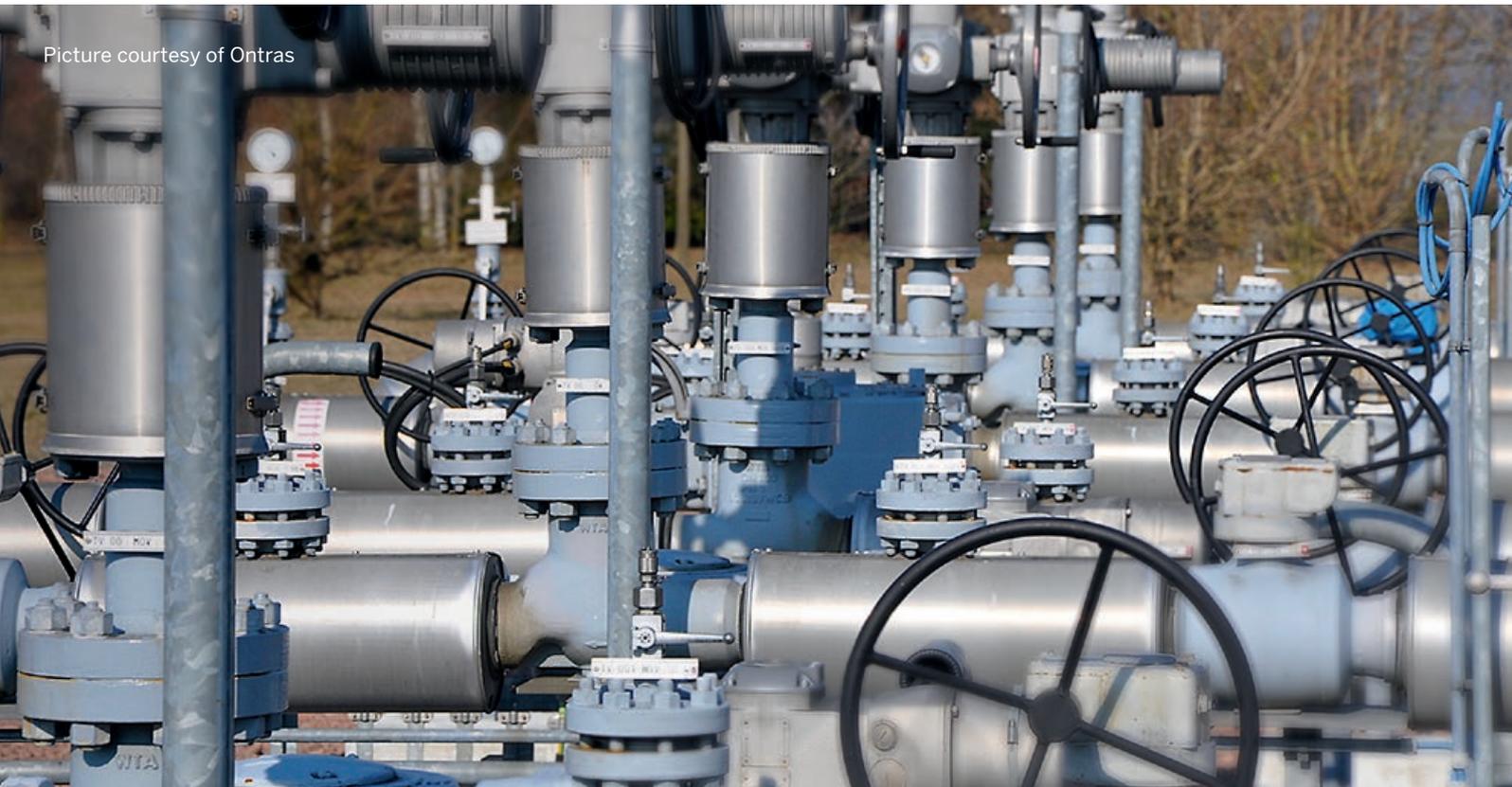
ARTICLE 9

All TSOs are required to offer standard capacity products, which according to Article 9, include the following:

- ▲ Yearly
- ▲ Quarterly
- ▲ Monthly
- ▲ Daily
- ▲ Within-day capacity products

As an exception, one TSO has offered a nine-month capacity product starting on 1 January 2017. Another TSO offered on top of standard capacity products a seasonal capacity product being any two consecutive Quarters, and balance of monthly capacity product - both offered by an Implicit Allocation Mechanism, unbundled on TSOs side of each IP only. One TSO does not offer within-day capacity yet.

Picture courtesy of Ontras



3.2 BUNDLED CAPACITY PRODUCTS

ARTICLE 19(1)

38 TSOs have offered the maximum possible available capacity as bundled capacity at each of their IPs. Five TSOs have not bundled all of their available capacity beyond the exemption given in Article 19(5) of CAM NC. Two of these five TSOs have mentioned that the

adjacent TSO has no obligation to bundle capacity as the country is a non-EU-Member State or has been granted derogation. For three TSOs Article 19(1) have not been applicable as implicit capacity allocation is applied.

ARTICLE 19(5)

38 TSOs have auctioned all of their unbundled capacity, if any, according to the auction calendar, which means that the capacity is offered in auctions on the following dates:

- ▲ Yearly capacity:
 - Firm – first Monday of March
 - Interruptible – first Monday of April
- ▲ 1st Quarterly capacity:
 - Firm – first Monday of August
 - Interruptible – first Monday of September
- ▲ 2nd Quarterly capacity:
 - Firm – first Monday of November
 - Interruptible – first Monday of December
- ▲ 3rd Quarterly capacity:
 - Firm - first Monday of February
 - Interruptible - first Monday of March
- ▲ 4th Quarterly capacity:
 - Firm – first Monday of May
 - Interruptible – first Monday of June
- ▲ Monthly capacity:
 - Firm – third Monday of month-1
 - Interruptible – fourth Monday of month-1
- ▲ Daily capacity:
 - Firm – default timing
 - Interruptible – one hour after firm daily capacity auction
- ▲ Within-day capacity:
 - Firm – one hour after the last day-ahead auction

Three TSOs have applied the implicit capacity allocation, therefore it is recorded as not applicable in this Report. Two TSOs mentioned that they are not obliged to fulfil this requirement as the adjacent TSO is from a non-EU-Member State.

ARTICLE 19(7)

38 TSOs have reported that they provide network users with the possibility to nominate bundled capacity via a single nomination procedure. Five TSOs have not provided such a possibility yet.

For three of these five TSOs the implicit capacity allocation has been applied. One other TSO expect to implement the requirements stemming from Article 19(7) during 2019. For one TSO it is not applicable as the adjacent TSO is from a non-EU-Member State.

3.3 VIP IMPLEMENTATION

ARTICLE 19(9)

According to Article 19.9 CAM NCTSOs shall implement as from 1st November 2018 functional virtual interconnection points (VIPs) where two or more Interconnection Points (IPs) connect the same two adjacent entry-exit systems if the following conditions are met:

- (a) the total technical capacity at the virtual interconnection points shall be equal to or higher than the sum of the technical capacities at each of the interconnection points contributing to the virtual interconnection points;
- (b) they facilitate the economic and efficient use of the system including but not limited to rules set out in Article 16 of Regulation (EC) No 715/2009.

Table 3.1 shows all VIPs which have been implemented by 1 November 2018.

VIP	Participating TSOs	Implementation date
Pirineos	Enagás, Teréga	01/10/2014
Ibérico	Enagás, REN	01/10/2012
Virtualys	Fluxys Belgium, GRTgaz	01/12/2017
Poland E-Gas/GASPOOL	GAZ-SYSTEM, ONTRAS	01/04/2016
VIP Brandov/GASPOOL	Gascade, Net4Gas, ONTRAS, OPAL	01/11/2018
NCG/GASPOOL (L)	GUD, Nowega, OGE	01/11/2018

Table 3.1: VIPs which have been implemented by 1 November 2018

In 2018, ACER and ENTSOG were notified of an issue in relation to the implementation of Virtual Interconnection Points via the Joint Functionality platform. During the implementation of the provision the issue of ambiguity in Article 19(9) occurred which led to different interpretations of Article 19(9) as well as uncertainty about the implications and as a result, to different implementation approaches. The issue was posted on the Functionality Platform. At the Gas Committee meeting on 20 June 2018, ACER and ENTSOG proposed two possible options to the European Commission (EC). The aim was to create legal certainty and harmonised interpretation across Europe. Both approaches foresaw an amendment of the CAM NC. As a follow up, the EC addressed a letter to ACER and ENTSOG giving their interpretation of

Article 19(9) NC CAM and denied following the suggested joint change proposal stating that an amendment of Article 19(9) is not required to deduct its meaning and ensure its correct implementation.

Some TSOs reported that due to the uncertainties regarding the VIP-establishment (FUNC issue mentioned above), the TSOs were therefore unable to initiate the adaptations to the core processes and IT-systems required for VIP-implementation for a certain time. The implementation of VIPs has implications for the whole complex IT-landscape of the TSOs. In particular time-critical, highly available systems and processes like nomination and grid steering systems are affected by this.

VIP*	Participating TSOs	Implementation date
GASPOOL – TTF	GASCADE, GTS, GUD	01/02/2020
TTF – NCG (L-Gas)	GTS, OGE, Thyssengas	Q1 2020
TTF – NCG (H-Gas)	Fluxys TENP, GTS, OGE, Thyssengas	Q1 2020
ZTP(H) – TTF	Fluxys Belgium, GTS	Q1 2020
Czechia – NCG	GRTgaz Deutschland, Net4Gas, OGE	01/03/2019
NCG Oberkappel	GRTgaz Deutschland, OGE	01/03/2019
PEG – NCG	GRTgaz, GRTgaz Deutschland, OGE	01/03/2019
ZTP/Belgium – NCG	OGE, Fluxys TENP, Thyssengas, Fluxys Belgium, Creos LU**	01/07/2019
Switzerland – NCG	OGE, Fluxys TENP, FluxSwiss, SwissGas	01/07/2019
TTF-GASPOOL-(L-Gas)	GTS, GTG-Nord, GUD	01/02/2020
VIP Negru Vodă 2,3	Transgaz, Bulgartransgaz	tbd

* The titles above might be provisional and subject to change until established

** Implementation in two steps: participation of Creos LU is currently under development, an implementation date is not yet defined

Table 3.2: VIPs which have not been implemented by 1st November 2018 but will be in future

Table 3.2 shows all VIPs which have not been implemented by 1 November 2018 but will be in future.

The remaining TSOs will not establish VIPs, because either the conditions of Article 19 (9) are not met or application of the article is not required.

3.4 CONVERSION SERVICE

ARTICLE 21(3)

As of 1 January 2018, TSOs shall offer network users holding mismatched unbundled capacity at one side of the interconnection point a free-of-charge capacity conversion service. This service is offered by all TSOs who hold unbundled contracts. Some TSOs reported

no requests from the network users.⁴ TSOs indicated this provision as not applicable as implicit capacity allocation is applied (3) or due to the fact that the only IP is connected to a third country. Another TSO did not implement this service.

3.5 INCREMENTAL CAPACITY

ARTICLE 26(3)

According to Art. 26(1) CAM NC, after the start of the annual yearly capacity auctions, TSOs shall initiate a Demand Assessment Phase in at least each odd-numbered year.

The publication of a Demand Assessment Report is not mandatory for even-numbered years and therefore not mandatory for 2018. However, two TSOs prepared and

published the Demand Assessment Report in 2018 on a voluntary basis.

The market Demand Assessment Report (DAR) on a voluntary basis was published on the websites of the TSOs concerned and on ENTSOG's webpage in November 2018.

3.6 ALLOCATION OF INTERRUPTIBLE SERVICES

ARTICLE 32(1)

According to this Article TSOs may only offer standard capacity products for interruptible capacity of a duration longer than one day if the corresponding monthly, quarterly or yearly standard capacity product for firm capacity was sold at an auction premium, was sold out, or was not offered.

All TSOs are compliant with this provision and therefore, it can be considered as fully implemented. However, 9 TSOs did not offer interruptible capacity of a duration longer than one day or do not offer interruptible capacity at all.

ARTICLE 32(2)

According to this Article TSOs shall offer a daily capacity product for interruptible capacity in both directions at interconnection points where the respective standard capacity product for firm capacity was sold out day-ahead or was not offered. At unidirectional interconnection points where, firm capacity is offered only in one direction, transmission system operators shall offer at least a daily product for interruptible capacity in the other direction.

All TSOs are compliant with this provision and therefore, it can be considered as fully implemented.

40 TSOs have offered a daily capacity product for interruptible capacity in both directions at IPs. Three TSOs reported that they did not offer interruptible daily capacity products at bidirectional IPs.

33 TSOs have offered daily capacity at unidirectional interconnection points. Other seven TSOs have reported that their IPs are bidirectional and three reported that they did not offer daily interruptible capacity.

ARTICLE 32(5)

The TSOs shall offer their interruptible capacity products via auctions as for the firm capacity products except for within-day capacity.

been offered in auctions that are held on the booking platforms.

38 TSOs have applied an allocation mechanism in line with the provisions laid out in Article 32(9) and 32(10) of the CAM NC. Thus, the interruptible capacity has

Two TSOs didn't not offer interruptible capacity at all as it was not demanded by network users. Three TSOs that are recorded as not applicable in this report have applied the implicit capacity allocation.

ARTICLE 32(6) & 32(7)

According to these Articles, within-day interruptible capacity shall be allocated by means of an over-nomination procedure and shall only be allocated when firm capacity, whether technical capacity or additional capacity, is sold out.

implicit capacity allocation applied. Nonetheless, these two TSOs have implemented Article 32(6) and 32(7).

35 TSOs have followed this procedure. For two out of these 35 this provision has not been applicable as

Five TSOs do not comply yet with Art. 32(6) and (7) CAM NC. Four of these TSOs plan to implement this during 2019. Two TSOs indicated that no within-day interruptible capacity product has been offered. Another TSO applies the implicit allocation mechanism.

ARTICLE 32(8)

37 TSOs published the amount of interruptible capacity products with a duration longer than within-day before the respective auction started.

Six TSOs did not follow this procedure due to the following reasons:

- ▲ no offer of any interruptible capacity products
- ▲ no offer of interruptible capacity except within-day products or backhaul capacity
- ▲ Application of implicit capacity allocation – nonetheless, one of these three TSOs has implemented Article 32(8).

3.7 MINIMUM INTERRUPTION LEAD TIMES

ARTICLE 33(1)

29 TSOs have jointly decided with their adjacent TSOs on a minimum interruption lead time. 10 other TSOs have decided to set individual lead times. One TSO stat-

ed that this is under discussion with the adjacent TSO.

For three TSOs the provision is not applicable, because they applied the implicit allocation.

ARTICLE 33(2)

A clear majority of the TSOs set their minimum interruption lead time according Article 33(2): For 25 TSOs it is 45 minutes after the start of the renomination cycle for that gas hour. For the other TSOs it varies between different lead-times. None of the TSOs have

shortened the minimum interruption lead time jointly with adjacent TSOs in the year 2018, since previous agreements stipulating the lead times were already in place. For three TSOs this Article has not been applicable as the implicit allocation has been applied.

3.8 DEFINED SEQUENCE OF INTERRUPTIONS

ARTICLE 35(3)

To accommodate the differences between the various interruptible capacity services across the Member States, 40 TSOs have implemented and coordinated the joint procedures according Article 35(1) and Article

35(2) on an IP-by-IP basis. The three TSOs that are recorded as Not Applicable in Article 35(3) have applied the implicit capacity allocation.

3.9 REASONS FOR INTERRUPTIONS

ARTICLE 36

40 TSOs have included the reasons for interruptions in their general terms and conditions and/or in separate interruptible contracts. 1 TSO did not include the reasons in the GT&Cs but has included them in

another document which is published on their website, two TSOs indicated that this Article is not applicable for them.

4 CONCLUSIONS

This section of the report summarises the main findings of the CAM implementation monitoring report.

As the Articles of Chapter II “Principles of cooperation” and Chapter III “Allocation of firm capacity products” are fully implemented, the main focus of this report was to analyse the implementation status of Chapter IV “Bundling of capacity at interconnection points” and Chapter VI “Interruptible Capacity”. A survey on Chapter V “Incremental capacity process” is planned to be launched in the near future and will be published by the end of this year. Therefore, the provisions in Chapter V have not been the primary aspect analysed in this report.

The implementation of the CAM NC is an important step in the harmonisation and development of an integrated energy market within the European Union. Network users can join and operate within the integrated market more easily than in a multitude of separate national markets with different rules and regulations for network access and capacity trading.

This monitoring report concludes that there has been further progress made towards the implementation of CAM provisions in comparison to the 2017 monitoring report. Almost all TSOs are maximising their available bundled capacity and enabling network users to nominate via a single nomination procedure. Despite the ambiguity regarding the implementation of VIPs, more than half of the affected TSOs are offering this service as of 1 November 2018 and in some cases before. All other affected TSOs are ready for VIP implementation and will do so during 2019 and 2020. This is an important step forward in facilitating gas transport and gas trading across the EU. The capacity conversion service is also in place across the EU but has only been requested a limited number of times by network user. A clear majority of the TSOs fulfil the Chapter VI “Interruptible Capacity” provisions and primarily offer firm capacity before interruptible.

Picture courtesy of Snam



ANNEX 1

SURVEY PARTICIPANTS

Survey Participants (ENTSOG Members)		
Austria	Gas Connect Austria GmbH	Trans Austria Gasleitung GmbH
Belgium	Fluxys Belgium S.A.	
Bulgaria	Bulgartransgaz EAD	
Croatia	Plinacro d.o.o.	
Czechia	NET4GAS s.r.o.	
Denmark	Energinet.dk	
Finland	Gasum Oy (derogation)	
France	GRTgaz SA	Teréga
Germany	bayernets GmbH	Nowega GmbH
	Fluxys TENP GmbH	NEL Gastransport GmbH
	GASCADE Gastransport GmbH	ONTRAS Gastransport GmbH
	Gasunie Deutschland Transport Services GmbH	Open Grid Europe GmbH
	GRTgaz Deutschland GmbH	terranets bw GmbH
	Gastransport Nord GmbH	Thyssengas GmbH
	NEL Gastransport GmbH	
Greece	DESFA S.A.	
Hungary	FGSZ Zrt.	
Ireland	Gas Networks Ireland Ltd.	
Italy	Snam Rete Gas S.p.A.	
Lithuania	AB Amber Grid	
Luxembourg	Creos Luxembourg S.A. (derogation)	
Netherlands	BBL Company V.O.F.	Gasunie Transport Services B.V.
Poland	GAZ-SYSTEM S.A./ GAZ-SYSTEM ISO	
Portugal	REN – Gasodutos S.A.	
Romania	Transgaz S.A.	
Slovakia	eustream a.s.	
Slovenia	Plinovodi d.o.o.	
Spain	Enagás Transporte S.A.U	
Sweden	Swedegas AB (derogation)	
United Kingdom	Interconnector Ltd.	Premier Transmission Ltd.
	National Grid Gas plc	GNI (UK) Ltd.

Table A 1: Survey Participants (ENTSOG members)

Survey Participants (Associated Partners and non-members of ENTSOG)	
Estonia	Elering AS (Associated Partner)
Germany	Fluxys Deutschland GmbH (no ENTSOG member)
	Lubmin-Brandov Gastransport GmbH (non-member) (exemption)
	OPAL Gastransport GmbH (non-member) (exemption)
Latvia	JSC Conexus Baltic (Associated Partner)

Table A 2: Survey Participants (Associated Partners and non-members of ENTSOG)

ANNEX 2

ADDITIONAL INFORMATION ON CAPACITY BOOKING PLATFORMS

The implementation of the CAM NC provisions requires auctioning of bundled capacity products at all IPs within the European Union, except where implicit allocation applies (Baltic states). To be CAM-NC-compliant, all auctions should follow the rules specified in the Network Code. Auctions are run on booking platforms which enable network users to book capacity for IPs connecting market areas, based on the choice of the respective TSOs about which platform to use.

In the European Union, three different booking platforms (BPs) have been established: PRISMA, GSA Platform (GSA) and the Regional Booking Platform (RBP).

As of January 2018, all relevant TSOs are connected to a booking platform.

Art. 37 CAM NC requires TSOs to reach a contractual agreement to use a single BP to offer capacity on an IP or VIP. In 2018, with entry into force of the amended CAM NC ACER became competent to make the decision on a BP in cases where TSOs and the relevant NRAs did not reach an agreement within the legal deadlines foreseen by the CAM NC.

The amended CAM NC procedure regarding BP applied to the case at the German-Polish border. On 16 October 2018 ACER published its decision establishing the GSA Platform as the BP to be used at the German-Polish border after requesting offers from the three BP, running a public consultation and assessing the BPs against a list of criteria¹⁾.

In February 2019, following an appeal case²⁾ before the ACER Board of Appeal (BoA), the BoA annulled ACER's Decision made in Oct. 2018 on the GSA Platform to be used at the German-Polish border confirming the accuracy of evaluation method applied by the Agency and indicating as a main objective the procedural shortcoming in the form of absence of respective documentation proving the adoption of such evaluation method by ACER in the course of the proceeding.

Being given two possible approaches by the BoA to rectify the procedure i.e. to repeat the tendering procedure from the beginning or, in the absence of objections toward the evaluation method applied, commence the proceeding based on the already submitted offers rectifying the procedural shortcoming, ACER has decided to reiterate the procedure from the outset. A new public consultation will be launched by the Agency as part of the new proceeding, after which candidate booking platforms will be invited to submit a new offer.³⁾

The Agency will take its decision within a period of six months following the notification of BoA's decision.

1) <http://www.acer.europa.eu/Media/News/Pages/ACER-decides-the-capacity-booking-platform-for-gas-to-be-used-on-the-border-between-Germany-and-Poland.aspx>

2) Appeal case A-002-2018, PRISMA European Capacity Platform GmbH v ACER

3) https://www.acer.europa.eu/en/The_agency/Organisation/Board_of_Appeal/Decisions/368%20A-002-2018%20final%20decision%20of%20the%20Board%20of%20Appeal%20%28for%20publication%20on%20web%29_Redacted.pdf

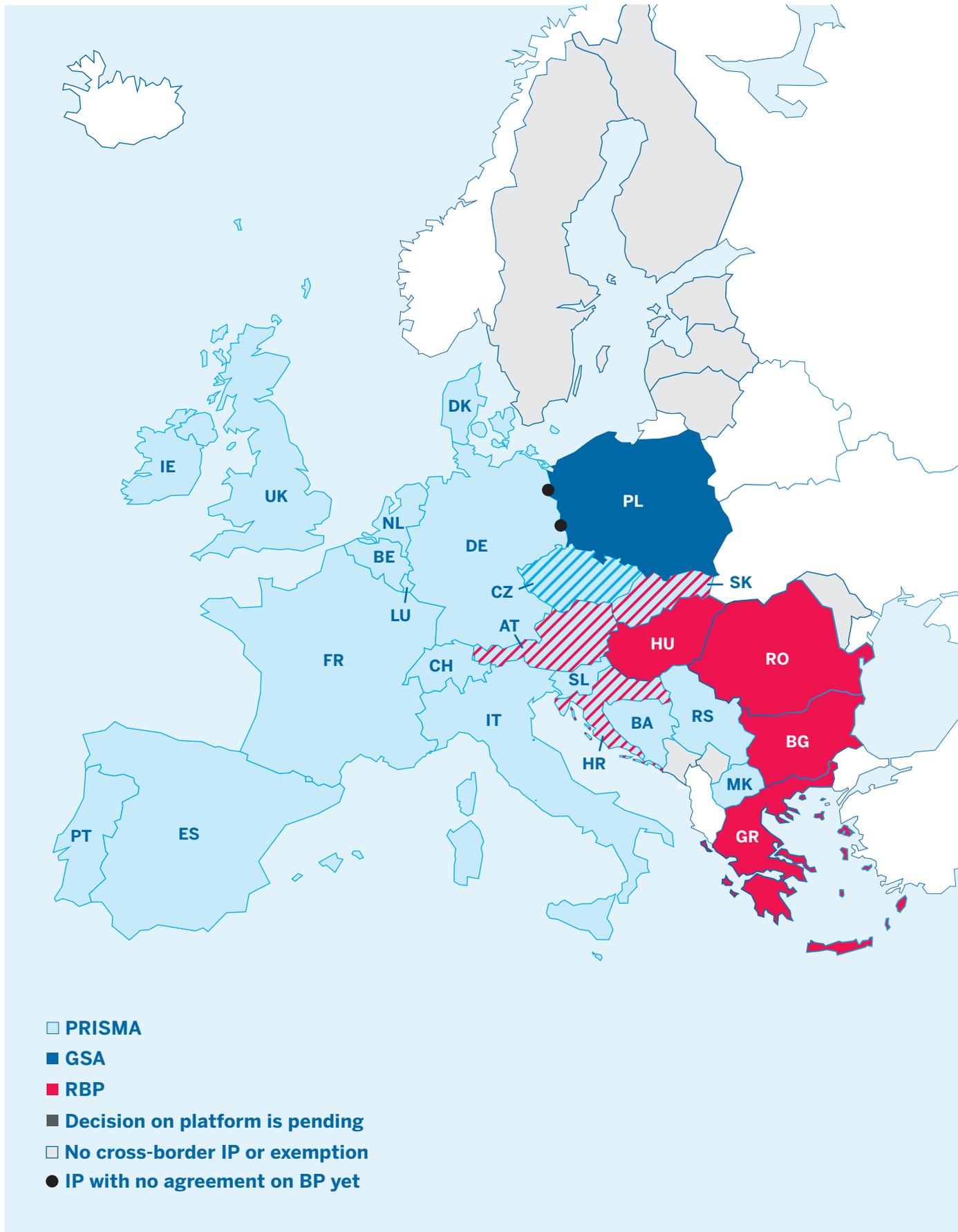
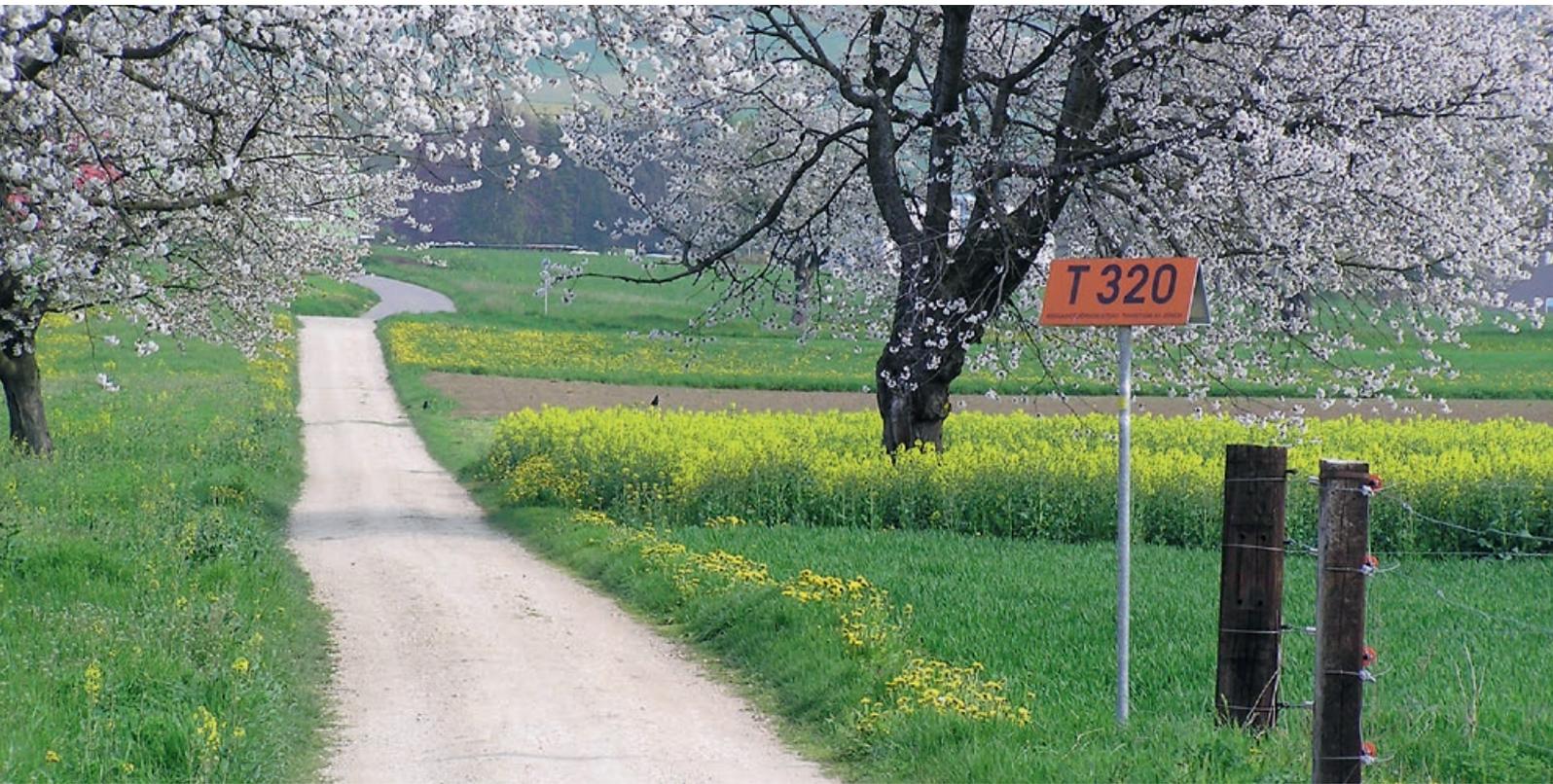


Figure A1: Use of capacity booking platforms within the EU in 2018

PART 2



EFFECT MONITORING REPORT OF CAM NC

2018

1 INTRODUCTION

The Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013 (CAM NC) was developed by ENTSOG (European Network of Transmission System Operators for Gas) in a process with two stages: After the European Commission (EC) submitted a request for a Framework Guideline to the Agency for the Cooperation of Energy Regulators (ACER), ENTSOG transformed the ACER Framework Guideline into the CAM NC, while conducting extensive public consultations. The 'old' CAM NC entered into force in 2013. At a later stage, the amended CAM NC has been developed which entered into force in April 2017 and repealed the first version of the CAM NC.

Article 8(8) of the Regulation (EC) 715/2009 ('Gas Regulation') requires ENTSOG to *'monitor and analyse the implementation of the network codes and the Guidelines adopted by the Commission in accordance with Article 6(11), and their effect on the harmonisation of applicable rules aimed at facilitating market integration'*. Article 8(8) also requires ENTSOG to *'report its findings to the Agency and [...] include the results of the analysis in the annual report'*. Under this provision, ENTSOG monitors the effects of the CAM NC.

ENTSOG, as required by the Gas Regulation, is publishing an Annual Report to assess ENTSOG's work and achievements retrospectively for each given year. The results of this CAM NC effect monitoring report will also be published in the ENTSOG Annual Report 2019. The effect monitoring process for preparing this report was launched in December 2018 to ensure the timely publication of the results in the Annual Report 2018.

This is the third Effect Monitoring performed by ENTSOG covering the gas year 2017/2018. The first Effect Monitoring report for the CAM NC was done for the gas year 2015/2016. ENTSOG's focus has been to identify to which extent the main aims of the CAM NC have been achieved. ENTSOG used three indicators for effect monitoring, these indicators have been used since the first report in 2016 and haven't changed since then. ENTSOG wishes to build historical data using these indicators to show the market development in the future.

The data used for this report was requested from the booking platforms used by TSOs for capacity allocation during gas year 2017/2018. Data from all used BPs has been added to this report, including were a TSO used more than one BP.



Picture courtesy of Gasum

2 EFFECT MONITORING INDICATORS

2.1 CAM INDICATORS

In order to calculate the indicators, the BPs have been requested to provide data regarding the capacity auction results, the volumes of all secondary trades concluded and the number of participants at the BP of the gas year 2017/2018 to TSOs. TSOs had to verify and to adjust the data in case of application of the

conversion service for mismatched unbundled capacity¹⁾. The offer of a conversion service is mandatory since 1 January 2018. After TSO amendment and confirmation, BPs or the TSO sent the data to ENTSOG.

2.2 CAM.1: Ratio of bundled capacity sold relative to the total capacity sold

This indicator shows the ratio of allocated bundled capacity relative to the total firm capacity sold. The indicator is calculated per standard capacity product type (yearly, quarterly, monthly and daily firm capacity prod-

ucts) of all TSOs. The outcome of this exercise is one ratio for each product type which are reflected in the results further below.

CALCULATION FORMULA:

$$CAM.1 = \frac{TCSB}{TCS} \times 100\%$$

Where:

CAM.1: Returns a ratio of total firm bundled capacity sold to total firm capacity

TCSB: Bundled firm capacity allocated

TCS: Total capacity (bundled and unbundled) allocated

INTERPRETATION:

The ratio of firm bundled capacity to the total allocated firm capacity is $0 \leq CAM.1 \leq 100\%$.

2.3 CAM.2: Share of secondary market-traded bundled capacity to secondary market traded total capacity

This indicator CAM.2 is used to measure the desired effect of the CAM NC to enhance secondary trading of (bundled) capacity. ENTSOG's basis for the calcula-

tion of the % of bundled capacity sold is the total volume of unbundled and bundled (firm) capacity sold on the secondary market.

CALCULATION FORMULA:

$$CAM.2 = \frac{TCSSMB}{TCSSM} \times 100\%$$

Where:

CAM.2: a ratio of total firm bundled capacity traded on secondary market to total firm capacity traded at secondary market

TCSSMB: bundled capacity traded at the secondary market

TCSSM: total capacity (bundled and unbundled) traded at the secondary market

INTERPRETATION:

The ratio of bundled capacity traded at the secondary market, relative to total capacity traded on the secondary market is $0 \leq CAM.2 \leq 100\%$:

Trade of unbundled capacity will be a clear indication that network users are trying to bundle their LT contracts. The indicator should tend to be 100 % in the long run.

2.4 CAM.3: Increase of market participants in a system

ENTSOG uses the number of participants who are registered and active on the BP to show the evolution

of participation on the market throughout the years.

1) In case a network user books bundled capacity in order to convert unbundled capacity on one side of this IP, the booking on the respective side needs to be adjusted in order to avoid overestimation.

3 RESULTS OF EFFECT MONITORING EXERCISE

3.1 CAM.1: Ratio of bundled capacity sold to total capacity sold

PRECONDITIONS

At the beginning, it is important to state that as from last years' monitoring report 2017 we have excluded all IPs which are CAM-relevant (due to NRA decision) only on one side of the IP. That means that only IPs that are CAM-relevant on both sides of a border have been

included in the scope of the questionnaire used to collect information for this report. This was a significant change in comparison to the monitoring report in the year 2015/2016 because of the impact on the sum of the total sold capacity.

CAM.1: Ratio of bundled capacity sold to total capacity sold MWh/h/y				
Product	Yearly capacity	Quarterly capacity	Monthly capacity	Daily capacity
Gas Year 2015/2016				
Bundled Capacity	25,369.2	1,054.1	6,408.7	9,056
Firm total Capacity	80,892.4	12,937.9	22,999.9	28,425
Ratio	31.36 %	8.15 %	27.86 %	31.86 %
Gas Year 2016/2017				
Bundled Capacity	2,535,733	13,766	16,866	6,182
Firm total Capacity	3,358,315	17,944	30,855	36,751
Ratio	75.51 %	76.72 %	54.66 %	20.24 %
Gas Year 2017/2018				
Bundled Capacity	121,026	24,611	56,076	13,868
Firm total Capacity	194,987	40,467	88,162	44,125
Ratio	62.07 %	60.82 %	63.61 %	31.43 %

Table 3.1: CAM.1: Ratio of bundled capacity sold to total capacity sold MWh/h/y

MONTHLY AND DAILY CAPACITY PRODUCTS

In figure 3.1 the ratio of bundled capacity to total capacity booked for monthly products was the highest at 64 % of overall sold capacity. As compared to last year the ratio shows an increase of 9 percentage

points. The highest increase with 11 percentage points as from last year is in the daily bookings where we have a ratio of 31 %.

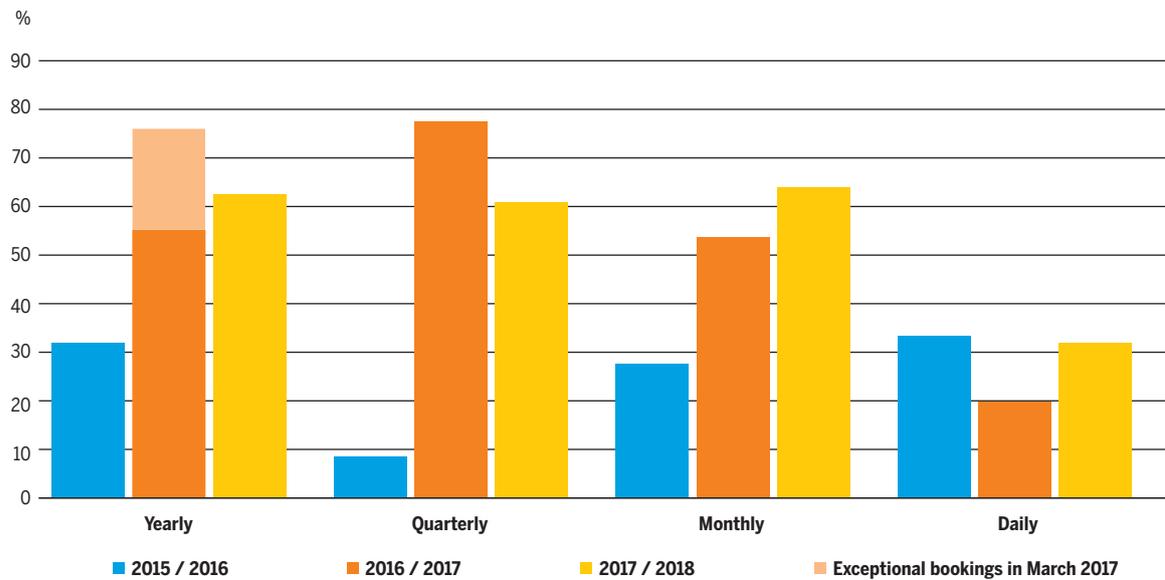


Figure 3.1: CAM.1: Ratio of bundled capacity sold to total capacity sold in %

YEARLY AND QUARTERLY CAPACITY PRODUCTS

Looking at the overall trend from 2015/2016 to 2017/2018 there is an increase of the bundled capacity share over the yearly and quarterly capacity sales. However, as compared to last year we can see a decrease of the bundled capacity share over the yearly and quarterly capacity sales. The ratio of bundled capacity to total firm capacity booked for yearly products is 62 % which is 13 percentage points less than last year. This trend was caused by the exceptional long-term bookings in the annual yearly capacity auction in March 2017 in Germany, Czechia and Slovakia. Excluding this amount of bookings from last years' data basis would lead to a ratio of approximately

55 % (see figure 3.1). Considering this, there would have been an increase of the ratio of 7 percentage points. This is also illustrated in figure 3.1.

The ratio of the quarterly products decreased from 77 % to 60 % as compared to last year. Considering the total bundled quarterly capacity of all the TSOs, figure 3.2 shows that the values almost double from 13,766 MWh/h/y in 2016/2017 to 24,611 MWh/h/y in 2017/2018. Considering the amount of the total quarterly capacity, the values increased from 17,944 MWh/h/y in 2016/2017 to 40,467 MWh/h/y in 2017/2018, which is about 2.5 times higher.

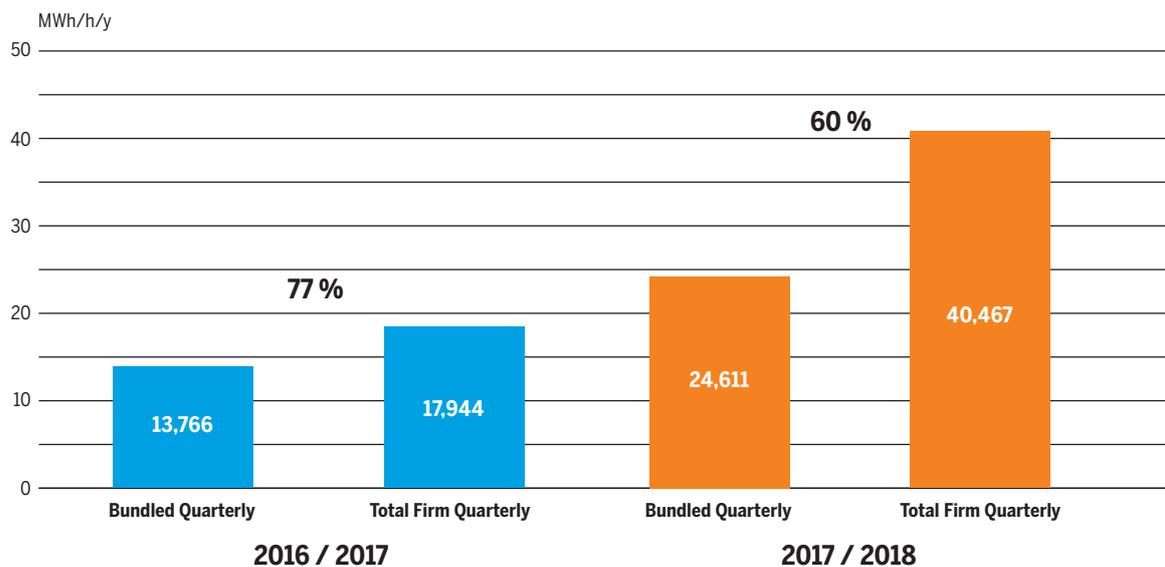


Figure 3.2: CAM.1: Total bundled quarterly capacity, total firm quarterly in MWh/h/y and ratio of quarterly products

We analysed this further by interviewing those members, who reported the lowest ratios in quarterly bookings. The following list summarises the results of the survey:

- ▲ As from 1 January 2018 TSO are obliged to offer a conversion service for network user who hold unbundled long-term contracts. Therefore, a capacity product that was sold as bundled in order to convert unbundled capacity into a new bundled capacity product should be excluded from the calculation for the ratio of the quarterly product.
- ▲ Differences in technical capacity volumes on the IP sides: The differences in technical capacity make it possible for one TSO to offer more capacity than the other one. This exceeding capacity can only be offered and booked in an unbundled way. The only solution to reduce the offer of this capacity would be aligning the technical capacity in the IP by either reducing the side with the largest amount on offer to the level of the other side of the IP, or by increasing the capacity via investment or optimisation on the side with the lower capacity. The mechanism of reducing or increasing the capacity shall be market-based. The offer of unbundled capacity is a side effect of the CAM NC due to the goals to maximize both the technical capacity offer and the bundled capacity offer at the same time.
- ▲ Minor cause of the unbundled bookings might be different booking platforms on both sides of the IP. This was the case at only one border between two member states and was tackled in the amendment of the CAM NC (Article 37). The impact of this issue should therefore decrease in the next monitoring report after ACER's final decision on which booking platform to be used between those member states in August 2019 at the latest.
- ▲ Network users match unbundled capacity on one side of the IP with interruptible capacity at the other side of the IP. Sometimes, the offer of capacity at one side of the IP is only interruptible (no firm capacity offer).

3.2 CAM.2: Share of secondary market-traded bundled capacity to secondary market traded total capacity

CAM.2: Share of secondary market-traded bundled capacity to secondary market traded total capacity in MWh/h/y			
Gas year	2015/2016	2016/2017	2017/2018
Bundled Capacity	511.4	13,369	1,835
Firm Capacity	135,329.10	2,130,633	463,527
Ratio	0.38 %	0.63 %	0.40 %

Table 3.2: CAM.2: Share of secondary market-traded bundled capacity to secondary market traded total capacity in MWh/h/y

Table 3.2 shows that the share of bundled capacity reallocated by secondary market trades is marginal: 0.40 %. This is caused by the legacy unbundled contracts which were concluded before the CAM NC entered into force.

In the past few years, there has also been a tendency of network users to book capacity on a short-term basis rather than on a long-term basis. Thus, long-term bookings are becoming less common than before the CAM NC came into effect and, hence, before the existence of bundled capacity.

3.3 CAM.3: Increase of market participants in a system

CAM.3: Increase of market participants in a system				
Gas year	2014/2015	2015/2016	2016/2017	2017/2018
Active	494	714	894	1,728
All	1,892	2,233	2,546	3,401

Table 3.3: CAM.3: Market participants in a system

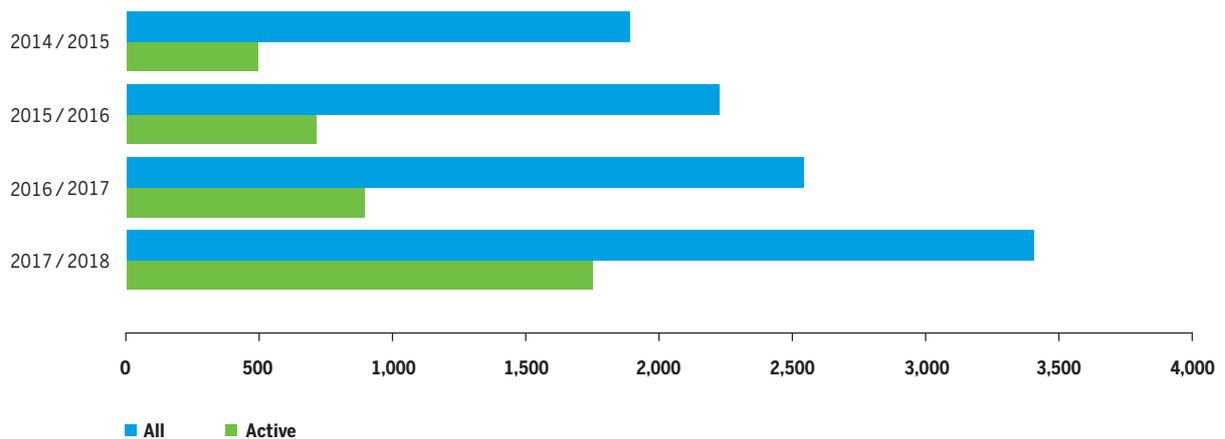


Figure 3.3: CAM.3: Market participants in a system

The importance of this indicator is directly related to whether CAM NC simplifies access to the European market, by offering capacity via joint booking platforms based on harmonized capacity allocation rules.

The indicator CAM.3 shows an important increase of both parameters “all participants” and “active participants” in the European market. The parameter “active participants” is defined as network users who bid on any of the capacity auctions during the gas year 2017/2018 while “all participants” include the “active participants” and those who registered but not necessarily bid on any auction.

- ▲ Number of all participants: this indicator has continuously increased from the gas year 2014/2015 to the gas year 2017/2018. There were 855 new network users registered at European booking platforms in comparison to the previous year. This means an increase of 33,58 % in one year.
- ▲ Number of active participants: this indicator has also continuously increased from the gas year 2014/2015 to the gas year 2017/2018. There were 834 new network users active at the European market in comparison to the previous year. This means an increase of 93,29 % in one year.

4 CONCLUSIONS

The following conclusions can be drawn from the analysis:

- ▲ Bookings of bundled capacity have increased as compared to 2015 when first Effect Monitoring was done and are likely to increase in upcoming years, especially once the existing unbundled contracts expire and after ACER's decision regarding the booking platform between Germany and Poland.
- ▲ Decreased share of bundled capacity sold to total capacity sold in favour of yearly capacity products from 2016/2017 to 2017/2018 has been influenced by exceptional yearly capacity bookings in March 2017. Excluding these bookings, the ratio of bundled bookings to total capacity allocated increases from 2016/2017 to 2017/2018.
- ▲ The share of traded bundled capacity to the total capacity on the secondary market is marginal.
- ▲ The increase of market participants indicates that the harmonisation of capacity allocation rules is providing more clarity and facilitating access for network users to different European markets.

Picture courtesy of GAZ-SYSTEM



ANNEX

SURVEY PARTICIPANTS

Survey Participants		
Austria	Gas Connect Austria GmbH	Trans Austria Gasleitung GmbH
Belgium	Fluxys Belgium S.A.	
Bulgaria	Bulgartransgaz EAD	
Croatia	Plinacro d.o.o.	
Czechia	NET4GAS s.r.o.	
Denmark	Energinet.dk	
France	GRTgaz SA	Teréga
Germany	bayernets GmbH	NEL Gastransport GmbH
	Fluxys TENP GmbH	Nowega GmbH
	GASCADE Gastransport GmbH	ONTRAS Gastransport GmbH
	Gasunie Deutschland Transport Services GmbH	ONTRAS Gastransport GmbH
	GRTgaz Deutschland GmbH	Open Grid Europe GmbH
	Gastransport Nord GmbH	terranets bw GmbH
	Jordgas Transport GmbH	Thyssengas GmbH
Germany	OPAL Gastransport GmbH (no ENTSOG member) (exemption)	
Greece	DESFA S.A.	
Hungary	FGSZ Zrt.	
Ireland	Gas Networks Ireland Ltd.	
Italy	Snam Rete Gas S.p.A.	
Netherlands	BBL Company V.O.F.	Gasunie Transport Services B.V.
Poland	GAZ-SYSTEM S.A.	GAZ-SYSTEM ISO
Portugal	REN – Gasodutos S.A.	
Romania	Transgaz S.A.	
Slovakia	eustream a.s.	
Slovenia	PLINOVODI d.o.o.	
Spain	Enagás Transporte S.A.U	
United Kingdom	Interconnector Ltd.	Premier Transmission Ltd.
	National Grid Gas plc	GNI (UK) Ltd.

The TSOs with implicit allocation mechanism and those under derogation were excluded from the scope of this monitoring

COUNTRY CODES (ISO)

AL	Albania	LU	Luxembourg
AT	Austria	LV	Latvia
AZ	Azerbaijan	LY	Libya
BA	Bosnia and Herzegovina	MA	Morocco
BE	Belgium	ME	Montenegro
BG	Bulgaria	MK	North Macedonia
BY	Belarus	MT	Malta
CH	Switzerland	NL	Netherlands, the
CY	Cyprus	NO	Norway
CZ	Czechia	PL	Poland
DE	Germany	PT	Portugal
DK	Denmark	RO	Romania
DZ	Algeria	RS	Serbia
EE	Estonia	RU	Russia
ES	Spain	SE	Sweden
FI	Finland	SI	Slovenia
FR	France	SK	Slovakia
GR	Greece	TM	Turkmenistan
HR	Croatia	TN	Tunisia
HU	Hungary	TR	Turkey
IE	Ireland	UA	Ukraine
IT	Italy	UK	United Kingdom
LT	Lithuania		

ABBREVIATIONS

ACER	Agency for the Cooperation of Energy Regulators	IP	Interconnection Point
BoA	Board of Appeal	LT	Long-Term
BP	Booking platform	NC	Network Code
CAM	Capacity Allocation Mechanism	NRA	National Regulatory Authority
ENTSOG	European Network of Transmission System Operators for Gas	RBP	Regional Booking Platform
EU	European Union	TSO	Transmission System Operator

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