



CONGESTION MANAGEMENT PROCEDURES GUIDELINES

2023

IMPLEMENTATION AND EFFECT MONITORING REPORT

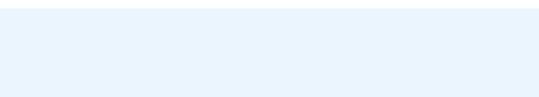


TABLE OF CONTENTS

EXE	EXECUTIVE SUMMARY						
	PLEME	ENTATION MONITORING	6				
2.1	Introd	uction	6				
2.2	Overvi	iew of Implementation Status	6				
2.3	Count	ries with Congested IPs	7				
2.4	Conclu	usions Implementation Monitoring	7				
EFF		MONITORING	8				
3.1	Introd	uction	8				
3.2	CMP E						
	3.2.1	Indicator 1 (CMP.1): Additional capacity volumes made available through each CMP	9				
	3.2.2	Indicator 1 (CMP.1): Results					
	3.2.3	Indicator 2 (CMP.2): Share of capacity reallocated					
	3.2.4	Indicator 2 (CMP.2): Results					
3.3	Conclu	usions Effect Monitoring	14				
AN	NEX		16				
4.1	Overvi	iew of Implementation Status in each Member State	16				
4.2	Survey	y Participants Implementation Monitoring					
4.3	Survey	y Participants and Included IPs Effect Monitoring	18				
со	UNTR	Y CODES (ISO)	19				
AB	BREVI	ATIONS	19				
		ISCLAIMER	20				





1 EXECUTIVE SUMMARY

The Guidelines for Congestion Management Procedures (CMP GL) were adopted on 24 August 2012 as "Commission Decision on amending Annex I to Regulation (EC) No 715/2009". The implementation date was 1 October 2013.

Article 8(8) of Regulation (EC) 715/2009 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'. Since July 2016, ENT-SOG also has to monitor if the TSOs have implemented Firm Day-Ahead Use-It-Or-Lose-It (FDA UI-OLI) in case their IPs are labelled as "congested" in ACER's Congestion Report.¹

The report reflects the status of the CMP GL implementation at the 1st November 2022 while it shows the effect of the CMP GL for the Gas Years (GY) 2020/2021 and 2021/2022. Information was collected by ENTSOG from European gas TSOs.

The results of the CMP GL Monitoring report will also be published in the ENTSOG Annual Report 2022. ENTSOG has aimed at producing a report which can be considered supplementary to ACER's reports. ENTSOG's focus is to identify to what extent the main aims of the CMP GLs have been achieved.

The **implementation monitoring** part of this report shows that only one TSO was still in the process of implementing some of the CMP measures by the end of 2022 and these measures are expected to be implemented by October 2023.

The **effect monitoring** part of this report shows that the current ways of offering additional capacity through existing CMP mechanisms allow network users to access the market in situations where IPs are contractually congested.

1 This obligation is coming from the CMP Annex 2.2.3.1: "National regulatory authorities shall require transmission system operators to apply at least the rules laid down in paragraph 3 per network user at interconnection points with respect to altering the initial nomination if, on the basis of the yearly monitoring report of the Agency in accordance with point 2.2.1(2), it is shown that at interconnection points demand exceeded offer, at the reserve price when auctions are used, in the course of capacity allocation procedures in the year covered by the monitoring report for products for use in either that year or in one of the subsequent two years, [...]".

2 IMPLEMENTATION MONITORING

2.1 INTRODUCTION

For the implementation monitoring of the CMP GL, the questionnaire was sent to TSOs who had not fully implemented the CMP GL when the last report was produced and to TSOs listed in the **2021 ACER congestion report (**).

For this report, a total of 3 TSOs were asked to complete the implementation questionnaire:

- 2 TSOs due to the fact that they had one or more IPs labelled as "congested" in ACER's 2021 congestion report and do not already have FDA UIOLI in place.
- ITSO due to the fact it was in the process of implementing the CMP measures in the last monitoring report, this TSOs also had one or more IPs labelled as "congested" in ACER's 2021 congestion report.

2.2 OVERVIEW OF IMPLEMENTATION STATUS

The following table presents the implementation status of the CMP GLs for TSOs across Europe which were not mentioned as congested in ACER's Congestions Report 2021.

No. of TSOs	Oversubscription and Buy-Back scheme (OS+BB) or Firm Day-Ahead UIOLI mechanism (FDA UIOLI)	Surrender of Contracted Capacity	Long-Term UIOLI (LT UIOLI)	Comments
38				1 TSO has implemented both OS+BB and FDA UIOLI
1				Implementation expected in October 2023
5				No IPs/Derogation
Implemented In process of implementation at 16.12.2022 Not applicable, as regards scope or derogation under Article 49 of Gas Directive				

Figure 1: Overview of Implementation status

The table above shows the status of implementation of the CMP GLs among ENTSOG Members². A detailed table showing the implementation status can be found in Annex 4.1.

6 | Congestion Management Procedures Guidelines – Implementation and Effect Monitoring Report 2023

² The six TSOs who have not implemented the CMP GLs are: CREOS Luxembourg, which holds a derogation, Infrastrutture Trasporto Gas, Società Gasdotti Italia, Swedegas AB, Regasificadora del Noroeste, which have no IPs in their networks, and Transgaz which is the only TSO still in the process of implementing the CMP GLs.

2.3 COUNTRIES WITH CONGESTED IPs

There are 6 TSOs that were in the situation of having at least one of their IPs labelled as congested in ACER's Congestion Report 2021. These TSOs come from 6 different Member States:

EU Member State	TSO(s)
Austria	GCA
Germany	ONTRAS
Greece	DESFA
Hungary	FGSZ
Poland	GAZ-SYSTEM
Romania	Transgaz

3 of these TSOs, GCA, ONTRAS and FGSZ, have already implemented FDA UIOLI as evidenced by previous monitoring reports and as shown in Annex 4.1. The remaining 3 TSOs, DESFA, GAZ-SYSTEM and Transgaz, were asked whether their NRAs have decided to implement FDA UIOLI for the congested points according to point 7 of article 2.2.3. of the CMP GL. Both in Greece and Poland, the NRAs have not required the TSOs to implement FDA UIOLI and they will therefore continue to use OS+BB, Surrender, and LT UIOLI. Transgaz has indicated they are still in the process of implementing the CMPs and that they will implement the congestion management measure after the NRA has approved the regulatory proposal put forth by Transgaz.

2.4 CONCLUSIONS IMPLEMENTATION MONITORING

- Only one TSO was still in the process of implementing some of the CMP measures by the end of 2022. This TSO has indicated that all CMP measures are expected to be implemented by October 2023.
- All other ENTSOG members have fully implemented the CMP GLs. When it comes to the choice between OS+BB and FDA UIOLI, most NRAs have approved the implementation of the OS+BB mechanism instead of FDA UIOLI.

3 EFFECT MONITORING

3.1 INTRODUCTION

The collected data for effect monitoring corresponds to the gas years 2020/2021 and 2021/2022. Only TSOs with IPs identified as "congested" by ACER in either of its two latest contractual congestion reports³ contributed to the data collection for the effect monitoring. As such, a total of 8 TSOs were asked to complete the questionnaire. To measure the effects of CMPs in the European market, ENTSOG and its members agreed on two indicators that show the impact of introducing congestion management mechanisms at IPs. Effect monitoring is performed only on the side of the IP labelled as congested by ACER.

3 8th and 9th ACER Reports on Contractual Congestion in the EU Gas Markets



3.2 CMP EFFECT MONITORING INDICATORS

3.2.1 INDICATOR 1 (CMP.1): ADDITIONAL CAPACITY VOLUMES MADE AVAILABLE THROUGH EACH CMP

- Premise 1: gas years to be used are 2020/2021 and 2021/2022
- Premise 2: MWh/h/y is used as the unit for every product to monitor the evolution of the below mentioned ratio by gas year for each of the 4 CMP measures.

Calculation formula:

Where:	
CMP.1x:	Return ratio of additional capacity allocated through a given CMP measure, relative to the total additional capacity offered through the given CMP measure.
ACMPx:	Sum of additional capacity allocated through a given CMP measure.
OCMPx:	Sum of additional capacity offered through a given CMP measure.
	CMP.1x:

Interpretation:

CMP.1x = 100

All the additional capacity offered through the CMP measure has been allocated, indicating a high market demand for this additional capacity. It also indicates a high efficiency of the CMP measure that allows for the complete reallocation of capacities.

CMP.1x < 100:

This indicates that not all the additional capacity offered through the CMP measure was allocated, meaning there was a lower market demand for this additional capacity during the period under consideration. It can also indicate the level of efficiency of the CMP measure in reallocation of capacities. The "x" in CMP.1x, ACMPx and OCMPx is to be replaced with one of the following numbers, depending on the CMP measure it was calculated for:

- ▲ 1 for Oversubscription and Buy-Back
- ▲ 2 for Firm Day-Ahead UIOLI
- ▲ 3 for Surrender of Contracted Capacity
- ▲ 4 for Long-term UIOLI

Note: If the amount of unused capacity reallocated by TSOs to the market measures the effectiveness of CMP, a deeper analysis of congested IPs will also be needed to gain a better understanding of the specific situation at each IP.

3.2.2 INDICATOR 1 (CMP.1): RESULTS

The following tables and graphs show the results for indicator CMP.1 for the GY 2020/2021 and 2021/2022. The analysis includes data from 11 IP sides in GY 2020/2021 and 11 IP sides for GY 2021/2022. All the included IPs are specified in Annex 4.3.

Gas Year 2020/2021

	OS+BB	FDA UIOLI	SURRENDER	LT UIOLI
Additional Capacity Offered (MWh/h/y)	1,161.88	233.95	3,538.17	-
(Re)allocated Capacity (MWh/h/y)	14.72	1.17	0	-
Ratio	1%	0.50 %	0	-

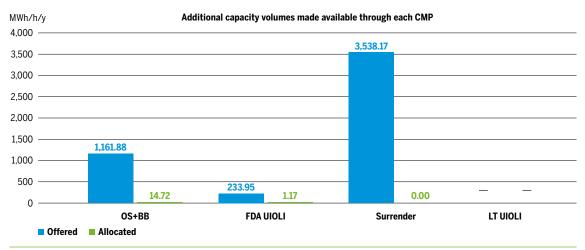


Figure 2: Results of CMP indicator 1 in MWh/h/y GY 2020/2021

Gas Year 2021/2022

	OS+BB	FDA UIOLI	SURRENDER	LT UIOLI
Additional Capacity Offered (MWh/h/y)	113.98	381.46	2,461.48	-
(Re)allocated Capacity (MWh/h/y)	84.95	37.31	0	-
Ratio	74.5 %	9.8 %	0	-

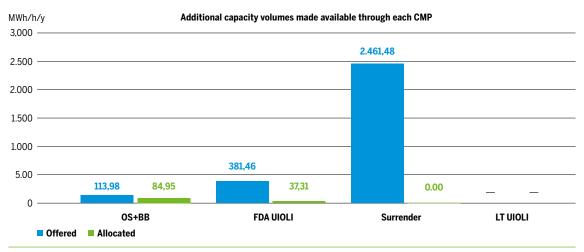


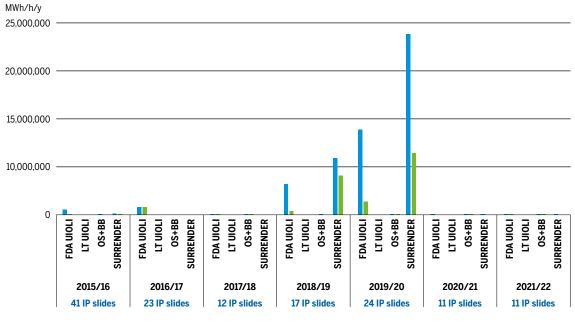
Figure 3: Results of CMP indicator 1 in MWh/h/y GY 2021/2022

As shown in Figures 2 and 3, very little capacity was reallocated for both Gas Years 2020/2021 and 2021/2022. Surrender of contracted capacity had the highest offer of capacity, however, it did not result in any reallocation of capacity during either gas year, neither did the LT UIOLI. FDA UIOLI and OS+BB were the only CMP mechanisms that resulted in reallocation.

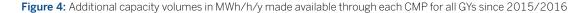
For 2020/2021 the reallocation ratio for OS+BB was 1.3 % and for FDA UIOLI 0.5 %. For 2021/2022 the reallocation ratio for OS+BB was 74.5 % and for FDA UIOLI 9.8 %. Increase in use of the capacity

made available to the market by the CMP measures in GY 2021/2022 might have been caused by the change of flows or geopolitical situation.

Figure 4 shows the evolution of all CMP measures since GY 2015/2016 by tracking the capacity made available. It also shows the number of IP sides included in the analysis for each GY. The figure shows that there was a spike in both offered and allocated capacity in GY 2018/2019 and 2019/2020, but that the numbers for GYs 2020/2021 and 2021/2022 are lower and more similar to previous GYs.



Offered Allocated



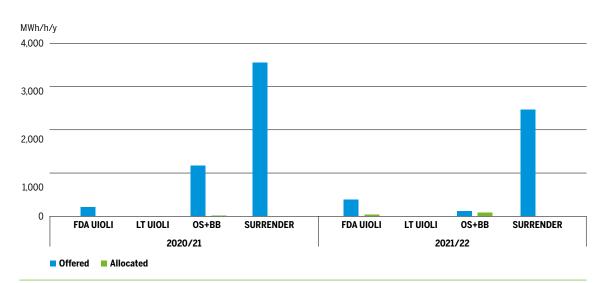


Figure 5: Additional capacity volumes in MWh/h/y made available through each CMP for GYs 2020/2021 and 2021/2022

3.2.3 INDICATOR 2 (CMP.2): SHARE OF CAPACITY REALLOCATED THROUGH CMP AMONG TOTAL CAPACITY REALLOCATED

Calculation formula:

$CMP.2 = \frac{ACMPx}{(ACMP + ASM)} \times 100$	Where: CMP.2:	Return ratio of additional capacity allocated through all CMP measures relative to the total allocation of additional capacity within a definite period of time. Sum of allocated additional capacity offered through all CMP measures within a definite
$(ACMP + ASM)^{(100)}$	ACMP:	
	ASM:	Sum of allocated capacity acquired from organ- ized secondary markets within the same period.

Interpretation:

CMP.2 = 100:

100: All reallocated capacity is supplied through CMP measures applied by TSOs

CMP.2 < 100:

This indicates that network users reallocate some capacity themselves using the secondary markets and not only through CMP measures applied by TSOs

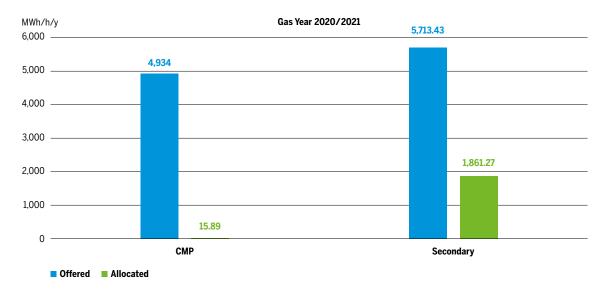
3.2.4 INDICATOR 2 (CMP.2): RESULTS

Also for this indicator, 11 IP sides were included in the analysis for gas year 2020/2021 and 11 IP sides for the gas year 2021/2022.

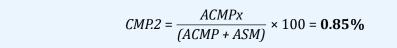
In figure 6 and 7, we can see that both means of re-offering unused capacity, via CMP mechanisms and via the secondary market, have been used in Europe during the past two gas years.

As could be observed in indicator CMP.1., both the offering of additional capacity through CMPs and on the secondary market has declined compared to the previous report. Through indicator CMP.2 we can also observe that the secondary market is now

both offering and reallocating a higher ratio of the total amount of capacity, compared to CMP measures while the reallocation ratio for both secondary market and CMP measures dropped significantly comparing to the previous report. Indeed, for both gas year 2018/2019 and 2019/2020 the amount of capacity that was reoffered on the secondary market was less than 1 percent of the total amount of reoffered capacity, whereas in 2020/2021 and 2021/2022 more than 50 % of the reoffered capacity was offered via the secondary market.







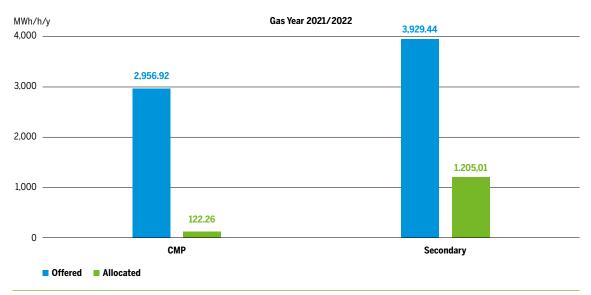


Figure 7: Results of CMP indicator 2 in MWh/h/y for GY 2021/2022

$$CMP.2 = \frac{ACMPx}{(ACMP + ASM)} \times 100 = 9.21\%$$

3.3 CONCLUSIONS EFFECT MONITORING

The final analysis allows the following conclusions to be drawn:

- The current ways of offering additional capacity through existing CMP mechanisms allow network users to still access the market in situations where IPs are contractually congested.
- ▲ The current⁴ situation in the European gas market shows that, overall contractual congestion is very limited. Only 11 IPs were identified as contractually congested in 2020/2021 and 2021/2022. It has also been observed that CMPs and the secondary market have reoffered capacity, however, the reallocation of this capacity has been relatively low, indicating that the market had little interest of this capacity even if the point had been identified as contractually congested.
- As mentioned in the last report, it has proven to be difficult to analyse and draw conclusions from previous GYs since the IP sides included in the analysis differ from year to year, depending on which IPs are found to be congested in the ACER contractual congestion reports. It can however be concluded that the most used measures vary between the gas years and in 2020/2021 and 2021/2022 OS+BB had the highest ratio of allocated capacity among the four CMP measures. However, the secondary marked provided the overall most reallocated capacity.

4 Gas years 2020/2021 and 2021/2022



4 ANNEX

4.1 OVERVIEW OF IMPLEMENTATION STATUS IN EACH MEMBER STATE

The following table shows the implementation status of the different congestion management procedures per EU Member State.

Country	OS+BB	FDA UIOLI	LT UIOLI	Surrender of Capacity	Comment
Austria					
Belgium					
Bulgaria					
Croatia					
Czech Republic					
Denmark					
Estonia					
Finland					
France					
Germany					OS+BB is temporarily in place since 1st of October 2021 and will be valid until 1st of October 2024
Greece					
Hungary					
Ireland					
Italy					Further measures to prevent congestions could be evaluated by the Regulator in the future (see Resolution 464/2016/R/gas, point 2.b)
Latvia					
Lithuania					
Luxembourg					Derogation under Article 49 of Gas Directive
Netherlands					
Poland					
Romania					Implementation expected at the end of 2023
Portugal					
Slovakia					
Slovenia					
Spain					
Sweden					Not applicable

Figure 8: Overview of Implementation status in each EU Member State

OS+BB is used in 18 out of the 25 Member States covered in this report. FDA UIOLI is currently used in 5 Member States. In one Member State, the TSOs is currently applying both OS+BB and FDA UIOLI. 2 MSs have been excluded because they hold derogations or the TSO does not have any IPs. In one MS there is still no decision from the NRA regarding the application of OS+BB or FDA UIOLI.

4.2 SURVEY PARTICIPANTS IMPLEMENTATION MONITORING

Member State	TSO		
Romania	Transgaz S.A.		
Poland	GAZ-SYSTEM		
Greece	DESFA		
Included because they had not implemented all CMP GL measures in the previous report. Included due to the presence of at least one of their IPs in ACER's Congestion Report. Both			

Figure 9: List of TSOs participating in the implementation monitoring

Figure 9 lists the 3 TSOs who answered the implementation monitoring questionnaire during November – December 2022. All 3 TSOs were asked to answer the questionnaire due to the presence of at least one of their IPs in ACER's Congestion Report. One of these three TSOs were also asked to provide information because it was in the process of implementing the CMP measures in the last monitoring report. The CMP Annex states that in case one IP is mentioned in ACER's Congestion Report as "congested", the relevant NRA shall require the TSO to apply the FDA UIOLI mechanism. There were three additional TSOs who had IPs labelled as congested in ACER's Congestion Report, however, they had already implemented FDA UIOLI in previous reports and were therefore not asked to participate in the implementation monitoring again.

All other TSOs which had implemented all CMP GL measures in the previous ENTSOG CMP report were not asked to answer the questionnaire again.

4.3 SURVEY PARTICIPANTS AND INCLUDED IPs EFFECT MONITORING

Figure 9 lists the 8 TSOs who answered the effect monitoring questionnaire during November – December 2022. The TSOs included in the survey are those with one or more IPs labelled as "congested" in ACER's Congestion Reports, published in 2021 and 2022.

Member State	TSO	Included IPs GY 2020/2021	Included IPs GY 2021/2022
Austria	GCA	Mosonmagyarovar Überackern SUDAL (AT) / Überackern 2 (DE) Oberkappel	Mosonmagyarovar
France	Terega	VIP PIRINEOS	
Germany	Bayernets ONTRAS		Überackern GCP GAZ-SYSTEM/ONTRAS
Greece	DESFA S.A.	Nea Mesimvria	Kulata (BG) / Sidirokastron (GR)
Hungary	FGSZ	Csanadpalota Mosonmagyarovar	Csanadpalota Mosonmagyarovar
Poland	GAZ-SYSTEM		GCP GAZ-SYSTEM/ONTRAS
Romania	Transgaz	Csanadpalota Negru Voda II Negru Voda III	Csanadpalota Negru Voda II Negru Voda III
Spain	Enagas Transporte S.A.U	VIP PIRINEOS	

Figure 10: List of TSOs participating in the effect monitoring

In addition to the TSOs listed in Figure 10, other TSOs and IPs were mentioned in ACER's Congestion Reports which are not included in the present report, for the following reasons:

- Germany (GASCADE): IPs Broichweiden Süd and Kienbaum has been excluded as they are no relevant points anymore due to German market area merger (01/10/2021)
- Germany (Gasunie Deutschland): IP Bunder-Tief has been excluded as it has been decommissioned since the German market area merger (01/10/2021).
- Germany (OPAL): IP Brandov has been excluded as it falls under the German Dual Model and is only active for updating information for old contracts. No capacity is auctioned at this point anymore.
- Germany (terranets bw, GUD, Lubmin-Brandov): Since only IPs which are CAM relevant on both sides of the IP are included in the scope of this report, IPs Greifswald and RC Thayngen-Fallentor have been excluded as the connected operators are Erdgas Ostschweiz (CH) and NordStream (RU).
- Poland (GAZ-SYSTEM): Since only IPs which are CAM relevant on both sides of the IP are included in the scope of this report, IP 'GCP GAZ-SYSTEM/UA TSO' has been excluded as the connected operator is Gas TSO of Ukraine (UA)

COUNTRY CODES (ISO)

AT	Austria	IE	Ireland
BE	Belgium	IT	Italy
BG	Bulgaria	LT	Lithuania
СН	Switzerland	LU	Luxembourg
CY	Cyprus	LV	Latvia
CZ	Czechia	МТ	Malta
DE	Germany	NL	Netherlands, the
DK	Denmark	NO	Norway
EE	Estonia	PL	Poland
ES	Spain	PT	Portugal
FI	Finland	RO	Romania
FR	France	RU	Russia
GR	Greece	SE	Sweden
HR	Croatia	SI	Slovenia
HU	Hungary	SK	Slovakia

ABBREVIATIONS

ACER	Agency for the Cooperation of Energy Regulators	FCFS ICA	First come first served Implicit Capacity Allocation
CMP GL	Congestion Management Proce- dures Guidelines	IP	Interconnection Point
ENTROO		LT	Long-Term
ENISOG	System Operators for Gas	NRA	National Regulatory Authority
EU	European Union	OS+BB	Oversubscription and Buy-Back
FDA	Firm Dav-Ahead	TSO	Transmission System Operator
		UIOLI	Use it or Lose it
		NRA OS+BB TSO	National Regulatory Authority Oversubscription and Buy-Back Transmission System Operator

LEGAL DISCLAIMER

This report was prepared by ENTSOG on the basis of information collected and compiled by ENTSOG from its members during the 4th Quarter of 2022. All content is provided "as is" without any warranty of any kind as to the completeness, accuracy, fitness for any particular purpose or any use of results based on this information and ENTSOG hereby expressly disclaims all warranties and representations, whether express or implied, including without limitation, warranties or representations of merchantability or fitness for a particular purpose. Any change on the information provided by an individual Transmission System Operator after the approval of this report has not been included in the present report. ENTSOG is not liable for any consequence resulting from the reliance and/or the use of any information hereby provided. The reader in its capacity as professional individual or entity shall be responsible for seeking to verify the accurate and relevant information needed for its own assessment and decision and shall be responsible for use of the document or any part of it for any purpose other than that for which it is intended.

Publisher	ENTSOG AISBL
	Avenue de Cortenbergh 100
	1000 Brussels, Belgium
Co-Authors	Karolina Golonka, Madeleine Hammerman, Laurent Percebois, CAP KG, MAR WG
Cover picture	Courtesy of Astora
Design	DreiDreizehn GmbH, Berlin www.313.de





ENTSOG AISBL Avenue de Cortenbergh 100 | 1000 Brussels, Belgium Tel. +32 2 894 51 00

info@entsog.eu | www.entsog.eu