



universität
wien

MASTER THESIS

Titel der Master Thesis / Title of the Master's Thesis

„The Impact of the Law and Policy of the European Union
on the Bulgarian Natural Gas Sector“

verfasst von / submitted by
Dian Krasimirov Boev

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Laws (LL.M.)

Wien, 2022 / Vienna 2022

Studienkennzahl lt. Studienblatt /
Postgraduate programme code as it appears on
the student record sheet:

UA 992 548

Universitätslehrgang lt. Studienblatt /
Postgraduate programme as it appears on
the student record sheet:

Europäisches und Internationales Wirtschaftsrecht /
European and International Business Law

Betreut von / Supervisor:

Univ.-Prof. Mag. Dr. Thomas Jäger, LL.M.

Page intentionally left blank

Abstract

Natural gas holds an important part of the energy mix and until the end of 2021 it was considered to increase its weight with respect to energy transformation and reducing CO₂ emissions. However, in the end of 2021 the European Commission announced a transition to renewable low-carbon gases.

The aim of the master thesis is first to follow the trend and development of the liberalization policy of the European Union with emphasis on the gas sector. The main instruments such as market opening, unbundling, third-party access and national regulatory authorities and other relevant ones for the thesis shall be investigated as a tool to tackle the state-owned natural champions characterized by natural monopolies.

Based on the conclusions made with regard to the liberalization policy, the Bulgarian gas market shall be investigated. Therefore, the findings show that the market is quasi liberalized and still dominated by the national champion Bulgarian Energy Holding (BEH) consolidating both – import and wholesale supply through the ‘public provider’ Bulgargaz and transmission and storage through currently the only transmission and storage system operator certified as an independent transmission operator Bulgartransgaz.

Although competition law rarely impacts a whole sector, two competition law cases of the European Commission display that the high market concentration (i) allows the *Gazprom Upstream gas supplies* Case to influence the whole sector by price re-negotiation between Bulgargaz and Gazprom; and (ii) demonstrates through the still pending *BEH Gas* Case that where the transmission and storage system operator stays part of the vertically integrated undertaking creates opportunities for bad practices expressed in market foreclosure with respect to third-party access to the network grid and storage facility and leading to preferable treatment of the supply arm of the integrated company.

Although usually regulated prices are considered contrary to the liberalization policy and rationale, the Bulgarian market is hybrid one where the public supplier sells under prices regulated by the national regulatory authority to exclusively enumerated consumers so that the end customer and the vulnerable consumers are protected.

Moreover, Bulgaria is taking steps to diversify its gas delivery routes and source of supply in order to tackle the dependence on one supplier and one route. Thus,

Interconnector Greece-Bulgaria is considered a route to have an Azeri gas delivered to Bulgaria and add to import portfolio gas other than Russian. Hence, Bulgaria is increasing its market linkage with its neighboring Member States. Nevertheless, the security of supply policy and the commitments imposed on Gazprom in *Upstream gas supplies* case enhance the gas-to-gas competition and encourage the contractual diversification and swap deals.

Zusammenfassung

Erdgas hält ein wichtiger Teil des Energiemixes und bis Ende 2021 wurde es davon ausgegangen sein Gewicht hinsichtlich auf den Energiewandler und die Reduzierung der CO₂-Emissionen zu erhöhen. Ende des 2021 kündigte die Europäische Kommission jedoch einen Übergang zu erneuerbaren CO₂-armen Gasen an.

Das Ziel dieser Master-Thesis ist zunächst, den Trend und die Entwicklung der Liberalisierungspolitik der Europäischen Union mit Schwerpunkt auf dem Gassektor zu verfolgen. Die Hauptinstrumente wie Marktöffnung, Entflechtung, Zugang Dritter und Nationale Regulierungsbehörden und andere Instrumente relevant für die Thesis sollen als Mittel zur Bekämpfung der natürlichen Monopole untersucht werden.

Auf Grund der Schlussfolgerungen hinsichtlich der Liberalisierungspolitik wird den bulgarischen Gasmarkt untersucht. Daher die Ergebnisse zeigen, dass der Markt quasi liberalisiert ist und noch vom nationalen Champion Bulgarian Energy Holding (BEH) dominiert wird, der sowohl konsolidiert die Import und Großhandelsversorgung durch den „öffentlichen Versorger“ Bulgargaz als auch die Fernleitung und Speicherung durch den derzeit einzigen Fernleitungsnetzbetreiber und Betreiber einer Speicheranlage Bulgartransgaz zertifiziert als unabhängiger Fernleitungsnetzbetreiber.

Obwohl das Kartellrecht selten einen ganzen Sektor beeinflusst, zeigen zwei wettbewerbsrechtliche Fälle der Europäischen Kommission, dass die hohe Marktkonzentration (i) ermöglicht, im Fall Gazprom *Upstream gas supply*, den gesamten Erdgas-Sektor durch Preisneuverhandlungen zwischen Bulgargaz und Gazprom zu beeinflussen; und (ii) durch das noch anhängige Leitverfahren *BEH Gas* demonstriert, dass, wenn der Fernleitungsnetzbetreiber und Betreiber einer Speicheranlage Teil des horizontal integrierten Unternehmens bleibt, Möglichkeiten für schlechte Praktiken entstehen, die sich in einer Marktabstottung in Bezug auf den Zugang Dritter zum Netz und zur Speicheranlage äußern, und zu einer

bevorzugten Behandlung des Versorgungsarms des integrierten Erdgasunternehmens führt.

Obwohl üblicherweise die regulierte Gaspreise als im Widerspruch zu der Liberalisierungspolitik und den Grundprinzipien der Liberalisierung betrachtet werden, ist der bulgarische Markt ein hybrider Markt, bei dem der öffentliche Versorger zu von der nationalen Regulierungsbehörde regulierten Preisen an ausschließlich benannte Verbraucher verkauft, um den Endkunden und die schutzbedürftigen Verbraucher zu schützen.

Darüber hinaus unternimmt Bulgarien Schritte zur Diversifizierung seiner Gaslieferanten und -quellen, um die Abhängigkeit von einem Versorger und einer Route zu überwinden. Somit wird der Verbindungsleitung Griechenland — Bulgarien als eine Route betrachten das aserbaidjanische Gas nach Bulgarien zu liefern und zum Importportfolio Gas anders als Russisches beizutragen. Daher verstärkt Bulgarien seine Marktverbindungen mit seinen benachbarten Mitgliedstaaten. Dennoch stärken die Politik der sicheren Gasversorgung und die Gazprom auferlegten Verpflichtungen im Fall von Gazprom *Upstream gas supply* die Gas-zu-Gas-Wettbewerb und fördern die vertragliche Diversifizierung und die Swapgeschäfte.

Acknowledgments

I would like to express my gratitude and thanks to my supervisor Univ.-Prof. Mag. Dr. Thomas Jäger, LL.M. who is a true inspiration to every law student with his sharp mind and deep and broad knowledge. Nonetheless, his accurate and appropriate instructions in the course of the writing of the thesis have immense impact on the research itself and the outcome of it.

Moreover, I would like to express my thanks to my family and my beloved ones who encouraged me through my LL.M. journey.

Last but not least, I would like to thank Judge Miglena Tyankova who has been fiercely encouraging me to dive in that endeavor.

Thank you all for your support.

Table of Contents:

List of figures	ix
List of abbreviations	x
I. Introduction	1
1. Subject Matter of the Master Thesis and the Topic in general	1
2. Objective of the Master Thesis and the Aims pursued	2
3. Limitations of the Master Thesis	5
4. Research Methodology	5
II. Regulatory Framework	7
1. General Remarks	8
2. First Energy Package	12
2.1. Market Opening	12
2.2. Third Party Access	14
2.3. Unbundling	19
2.4. National Regulatory Authority	21
2.4. Concluding Remarks	21
3. Second Energy Package	22
3.1. Market Opening	22
3.2. Third Party Access	23
3.3. Unbundling	24
3.4. National Regulatory Authority	26
3.5. New Infrastructures	26
3.6. Concluding Remarks	27
4. Energy Sector Inquiry	27
5. Third Energy Package	29
5.1. Market Opening	30
5.2. Third Party Access	31
5.3. Unbundling	31
(A) Ownership Unbundling	32
(B) Independent System Operator (ISO)	33
(C) Independent Transmission Operator (ITO)	34
(D) Unbundling regime under Art. 9, Para. 9 of the Third Gas Directive (ITO+)	34
5.4. National Regulatory Authority	35
5.5. Other advancements of the Third Energy Package	36
(A) Agency for the Cooperation of Energy Regulators (ACER)	36
(B) Certification Procedure	37
(C) Third Country Regime ('Lex Gazprom')	38
(D) Exemption Regime	39
6. Final Remarks	41
III. Bulgarian Gas Sector Specifics	45
1. Introductory Remarks	45
2. Institutional Structure of the Bulgarian Gas Market	47
(A) Bulgarian Energy Holding (BEH)	49
(B) Energy and Water Regulatory Commission (EWRC)	50
(C) Bulgargaz	51
(D) Bulgartransgaz	52
(E) ICGB	55
(F) Balkan Gas Hub	59
3. Detailed analysis of the national market	59
(A) Introductory observations	59
(B) Wholesale supply	61
(C) Transmission segment	63
(D) Distribution segment	64

(E) Regulatory Environment	65
(F) Interconnectivity with neighboring countries	65
1. Interconnectivity with EU Member States	66
2. Interconnectivity with non-EU countries	67
(G) The rate of introducing liberalization on the national market	70
IV. Competition Law in the Energy Sector	75
1. Introductory Remarks	75
2. Case AT.39816 <i>Upstream gas supplies in Central and Eastern Europe</i>	76
(A) Procedural backgrounds on the investigations	76
(B) Gazprom's Commitments Proposal	79
(C) The obligations imposed on Gazprom	80
(D) Rationale and principles behind the Commission's concerns	83
1. Territorial restrictions preventing the free flow of gas	83
2. Swap-like options	84
3. Gas price	84
4. Infrastructure concerns	85
(E) Implications on the Bulgarian market	86
3. Case AT.39849 <i>BEH gas</i>	87
(A) Procedural backgrounds	87
(B) Prohibition Decision	88
1. Refusal of access to transmission network and storage facility	89
2. Capacity hoarding	91
3. Concluding observations	92
4. Concluding remarks	94
V. Security of Supply	97
1. Introductory Remarks	98
2. Diversification of supply sources and routes	102
3. Long-term natural gas contracts and take-or-pay obligations	106
4. Concluding remarks	108
VI. Consumer Welfare	111
1. Introductory Remarks	111
2. Regulated prices	112
3. Vulnerable customers	115
4. Concluding remarks	117
VII. Conclusions & Recommendations	119
1. Conclusion	119
2. Recommendations	124
(A) Listing 50 % of the stocks of Bulgartransgaz on Bulgarian Stock Exchange	124
(B) Strategic gas storage	125
(C) Gas-to-gas competition	126
(D) Increase in the rate of gas in energy mix	127
Table of legislation, cases and sources	129
(A) Table of legislation	129
(B) Table of Cases	130
(C) European Commission Decisions	131
(D) European Commission Documents and Staff Working Documents	132
(E) Notices, Opinions, Proposals, etc. of the European Commission	134
(F) Speeches	135
(G) Press releases of the European Commission	135
(H) Other sources	136
Bibliography	142
(A) Encyclopedias	142
(B) Books	142
(C) Articles, Master Thesis, Papers, Reports	143

List of Figures:

Figure 1: Vertically Integrated Undertaking	20
Figure 2: Unbundling of TSO and DSO under the SEP	24
Figure 3: Development of the energy packages	41
Figure 4: The structure of the Bulgarian energy market with emphasis on gas	47
Figure 5: Commission's concerns about Gazprom's commercial practices	77
Figure 6: Gazprom's proposed remedies to the competition concerns raised by the Commission	79
Figure 7: Obligations imposed on Gazprom	81
Figure 8: Southern Gas Corridor	104

List of abbreviations:

ACER	Agency for the Cooperation of Energy Regulators
bcm	billion cubic meters
BEH	Bulgarian Energy Holding EAD
CEE	Central and Eastern Europe
COMECON	Council for Mutual Economic Assistance
CPC	Commission for Protection of Competition
DG	Directorate General
DSO	distribution system operator
EC	European Communities
ENTSO-G	European Network of Transmission System Operators for Gas
EU	European Union
EWRC	Energy and Water Regulatory Commission
IBR	Interconnector Bulgaria-Romania
IBS	Interconnector Bulgaria-Serbia
IGB	Interconnector Greece-Bulgaria
IP	interconnection point
ISO	independent system operator
ITO	independent transmission operator
LNG	liquefied natural gas
mcm	million cubic meters
NRA	national regulatory authority
nTPA	negotiated third party access
PCI	project of common interest
rTPA	regulated third party access
SEC	Second Energy Package
SEE	Southeastern Europe
SGC	Southern Gas Corridor
TAP	Trans Adriatic Pipeline
TANAP	Trans Anatolian Natural Gas Pipeline
TEP	Third Energy Package
TFEU	Treaty on the Functioning of the European Union
TPA	third party access
TSO	transmission system operator
TYNDP	ten-year network development plan
VIU	vertically integrated undertaking
UGS	Underground gas storage
US	United States

Chapter I:

INTRODUCTION

*'A European Energy Policy needs to be inclusive in its nature. It needs to involve citizens, business and Member States in its preparation and development.'*¹

1. Subject Matter of the Master Thesis and the Topic in general

Natural gas is a “primary” source of energy consisting of hydrocarbons (mainly methane)². It has a share of 20 to 25 percent of the energy consumption and thus it plays crucial role in the energy mix within the European Union³. Moreover, at national level, in Bulgaria that share in 2016 was around 15 percent of the energy mix⁴.

Being a natural resource, it cannot be produced in ‘artificial conditions’ and therefore it is mostly imported outside the EU and requires specific facilities to be stored at⁵ and in general, specific infrastructure to be transported with, *inter alia* pipelines and LNG cargoes.

The Commission considers gas to be crucial for the transformation of the energy system, in particular in terms of transition from coal to gas and thus reducing the CO₂ emissions. As generalized further, integrated market, liquidity, diversity of supply sources and more storage capacity, long-term gas supply contracts enhance new investments in gas production and transmission infrastructures and last but not least, flexibility in price formation by moving away from pure oil-indexation are prerequisites for gas to maintain its competitive advantages as a fuel for electricity generation⁶.

¹ Andris Piebalgs, Energy Commissioner, “Gas goes global – Sellers or Buyers market?”, Speech at the World Gas Conference, 9 June 2006, SPEECH/06/364 <https://ec.europa.eu/commission/presscorner/detail/en/speech_06_364> accessed 22 August 2021.

² Commission of the European Communities, DG Competition Report on Energy Sector Inquiry, 10 January 2007, SEC(2006) 1724, First Phase (Gas), 22.

³ Susanne Nies, Jacques Delors, The European Energy Transition: Actors, Factors, Sectors, European Energy Studies Volume 14 (Claeys & Casteels Law Publisher, 2019), ISBN E-book 9789077644591, 313.

⁴ *ibid*, 314, Table 19.1.

⁵ Elmira Lyapina, The EU Gas Regulations and their Influence on the legislation of the Czech Republic, International Comparative Jurisprudence (2018, Volume 4, Issue 1), 42-51, <<http://dx.doi.org/10.13165/j.icj.2018.06.005>> accessed 28 August 2021, 44.

⁶ European Commission, Energy Roadmap 2050, COM(2011) 885 final (15 December 2011) <https://ec.europa.eu/energy/sites/ener/files/documents/2012_energy_roadmap_2050_en_0.pdf> accessed 22 July 2021, 12.

Gas industry is viewed as comprising three main segments, namely (i) upstream market which deals with exploration, production and export/import⁷; (ii) midstream market dealing with transportation by means of gas pipelines or in tankers in cases of LNG; (iii) downstream market which deals with distribution to final consumers⁸; it can be argued also, that there is a fourth segment (iv) power generation customers or large industrial companies⁹.

The liberalization with its key instruments is seen as a tool to tackle the natural monopolies which used to characterize the natural gas markets due to its network base by means of unbundling and third-party access to the network.

Diversification of energy sources is considered to be crucial for 'ensuring secure and resilient energy supply'¹⁰. Namely the Southern Gas Corridor is seen as an opportunity to be seized by Bulgaria to ensure its diversification of the gas supplies and routes which will enable Central Asian countries such as Azerbaijan to supply gas to Bulgaria by means of the Interconnector Greece-Bulgaria and in addition to the Central East European gas market and through Romania and Hungary by means of the Bulgaria-Romania-Hungary-Austria gas transmission corridor.

2. Objective of the Master Thesis and the Aims pursued

The Bulgarian natural gas sector has accumulated attention to itself in the recent years. The government is criticized for its inability to liberalize the market and reduce the dependency on the Russian gas by introducing competition on the market by means of new supply sources and routes.

Until the end of the 1989 being part of the respectively Council for Mutual Economic Assistance (COMECON) and the Soviet-bloc Bulgaria has been strongly influenced by the Soviet Union where at national level the economy has been directed and managed by the state by means of state-owned undertakings. Energy policy in general and in

⁷ In my view, the activities dealing with export/import shall find its place in that segment.

⁸ Mirja Schröder, EU Gas Supply Security, A Political Vision of the Southern Gas Corridor, Studies on the European Union Series, Volume 16, (1st edition, 2019, Nomos Verlagsgesellschaft mbH & Co. KG), ISBN online: 978-3-7489-0029-0 < <https://doi.org/10.5771/9783748900290> > accessed 27 July 2021, 28.

⁹ Tade Oyewunmi, Energy Security and Gas Supply Regulation in the European Union's Internal Market, European Networks Law & Regulation Quarterly, Volume 3, Issue 3 (2015), 187 – 202 < <https://www.proquest.com/docview/1731750514> > accessed 9 October 2021, 190.

¹⁰ Christopher Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (Edward Elgar Publishing, 1st edition, 2017) ISBN 9789077644447, 101.

particular natural gas sector most likely is not an exception. Thus, Bulgaria has been undergoing the transition to market-based economy in the last over 30 years.

With regard to energy policy the term 'liberalization' has become a keyword and it is perceived as 'magic wand' capable of transitioning the state-owned energy market into competitive one immediately and the government and the national legislator are criticized that the gas market is still not liberalized despite the accession of Bulgaria to EU in 2007. Moreover, usually Bulgaria is being criticized for the low rate of its European Union integration and thus in public it is often stated that the national market for natural gas is not liberalized.

Therefore, the objective of the thesis shall be firstly the research of the rationale and roots of the liberalization policy of the European Union and in particular its key instruments with respect to the natural gas market. Being a Member State of the European Union, Bulgaria not only has to comply with the law at supranational level but moreover, to adopt the good practices and follow the good examples.

After having researched what the liberalization policy stands for, the Bulgarian natural gas sector shall be tackled and researched with the aim to examine whether national market is *de jure* liberalized and respectively to what extent and if in general it is *de facto* liberalized.

The objective of the thesis lies behind the examination in liberalization policy that Bulgaria has adopted in its gas sector, the challenges that may have appeared on the way to liberalization and to conclude with the rate of the liberalization. If full liberalization is evident or the transition has not been completed due to the market specifics of the Bulgarian the gas market it shall be concluded where these specifics have resulted in semi/hybrid liberalization. Under these circumstances, the willingness from the state's side (being the government, the legislator and the regulator) is crucial for the rate of the liberalization.

In general, the literature does not address the *de facto* liberalization of EU national markets but in general the liberalization policy at the Union level and rationale behind it. Moreover, the national markets rarely catch attention, especially the one such as Bulgaria, which in its size is considered small. Thus, the thesis aims to point out how prepared Bulgaria joined EU with respect to national legislation in gas sector and to deeper investigate the *status quo* of the Bulgarian natural gas market and its compliance with the policy of the Union and further, the advancements that has been

lately made in the sector. Having a state-owned vertically integrated undertaking in the face of the Bulgarian Energy Holding (BEH) makes the task to investigate the national gas market easier since the market players are to some extent limited.

Moreover, besides the regulatory framework, competition law plays huge role in the energy sector where it controls the actions of a particular company or companies in a given case. In a small market such as the Bulgarian one, dependence on one main supplier may impede the free and fair competition in the national market and therefore with regard to Bulgaria, competition law cases could play important role and have significant impact on the sector as a whole either in a positive way or pointing out the market deficiencies depending whether a specific case affects a company having weight on the market. Thus, competition law cases concerning Bulgaria, if any, shall be investigated in details and their eventual impact on the market as a whole.

Taking into account the abovesaid, the hypothesis of the research is that Bulgaria is far from having its natural gas market liberalized and thus is falling behind to comply with the policy of liberalization followed by the Commission. Moreover, the intervention of the state in the face of (BEH) in the energy policy and particularly in natural gas sector shall be deemed detrimental to the effective competition.

Therefore, the master thesis shall research at the first place what is liberalization policy in the gas sector and how the liberalization itself can be achieved, second the *status quo* of the natural gas market in Bulgaria and furthermore, the application of the competition law rules to the natural gas economy with reference to Bulgaria, the security of supply policy and how the structure of national gas market affects the end consumers in Bulgaria. At the end, the conclusions shall give light whether the research reaffirms the hypothesis and the recommendations shall give suggestions based on the research carried out.

The master thesis is structured as follows:

- (i) Chapter I is the Introduction;
- (ii) Chapter II describes the Regulatory Framework at European Union level which gives light over the liberalization itself and its key instruments;
- (iii) Chapter III deals with the Bulgarian natural gas sector in terms of its institutional structure and characteristics;

(iv) Chapter IV investigates competition law's impact and in particular how e.g. the Gazprom Case impacted positively the national gas market while the *BEH Gas* Case displayed the deficiency of the vertical integration which Bulgarian Energy Holding embodies;

(v) Chapter V deals with security of supply policy which raises serious concerns and is crucial for the Commission;

(vi) Chapter VI pays attention to the consumers and how the structure of the Bulgarian natural gas market is presumably protecting the final customers;

(vii) Chapter VII deals with the concluding remarks and gives general recommendations in terms of exploiting the characteristics of the national market the best way possible and still being in compliance with the EU law;

3. Limitations of the Master Thesis

Since the natural gas sector deserves a book for the topic itself, the current master thesis does not pretend to give profound analysis of the policy of European Union in creating internal energy market, in particular one for natural gas.

On the contrary, it shall give brief overview in terms of liberalization policy and the rationale behind it. Being part of the European Union, the Union law has strong inclination on the direction how the national regulatory environment in Bulgaria evolves. Therefore, the thesis shall investigate the *status quo* of the market and briefly point out how prepared Bulgaria joined the Union in terms of compliance with the liberalization policy and the recent advancements of the market if such are evident.

Since the transmission of natural gas itself is subject to thorough and separate regulation by the Commission in order to ensure transparency and non-discrimination in third-party access to transmission grid, the current thesis shall not investigate on that topic in details.

4. Research Methodology

Taking into account that the topic is legal, the research shall rely predominantly on qualitative research method where it will combine doctrinal research, empirical research and international research. However, the thesis will rely on quantitative research to supplement and illustrate the outcome achieved by the qualitative research or to make comparisons in order to better illustrate certain argument.

The doctrinal or also called 'black-letter' research by clarifying the law relies on primary and secondary sources of law and thus, being 'library-based', focuses on reading and analyzing these sources¹¹. Meanwhile, the empirical research, being non-doctrinal, is based on the observations of the world¹² and to be more specific, the policy research shall be applied in order to explain the rationale behind the adoption of certain set of legislation or law reform research which seeks to display the existence of legal problem and in general these both types of research include a consideration of the social impact of the current law¹³. Last but not least, international legal research¹⁴ shall be carried out taking into account supra-national law, in particular law of the EU, since national law not only intersects with the EU law but the latter is separate legal order acting besides the national legislation of the Member States of the EU.

The research will be carried out with respect to the energy sector and in particular the liberalization policy of the natural gas sector, the security of supply policy, competition law case analysis, relying not only on textbooks, papers and articles but on soft-law issued predominantly by the European Commission. Moreover, the thesis shall rely on documents having practical experience such as the annual reports of the Bulgarian national regulator to the European Commission and Decisions of the European Commission.

¹¹ Mike McConville, Wing Hong Chui (eds.), *Research Methods for Law* (Edinburgh University Press, 2007) ISBN 9780748633586, 4, 47.

¹² *ibid*, 18,19.

¹³ *ibid*, 20.

¹⁴ *ibid*, 7.

Chapter II:

REGULATORY FRAMEWORK

'Competition policy alone cannot liberalise markets. The report (DG Competition Report on Energy Sector Inquiry, 2007) makes clear how urgent and important it is that the enforcement of competition law goes hand in hand with a strengthening of the regulatory framework'¹⁵

Network industries are designed to deliver goods or service on the retail market based on a specific infrastructure which connects the upstream production and supply with the final customers¹⁶. Natural gas being transported through pipelines as a main type of delivery is considered as a network industry.

Thus, the gas industry as a network based one, has been characterized as a natural monopoly dominated usually by state-owned incumbents¹⁷ which governed all the segments – from production and/or import through wholesale and transmission to end supply and as a result of it the vertical integration appeared in the sector.

Hence, the public ownership and intervention in the sector is considered in conflict with the new competitive reality. Accordingly, the privatization was seen as more efficient than public property. The term 'privatization' is defined as 'the shifting of a function, either in whole or in part, from the public sector to the private sector' where the influence of the public sector is significantly reduced¹⁸.

More than 30 years of political discourse and consecutive reforms were needed in order to establish regulatory framework for the internal gas market at EU level¹⁹ starting in 1990s.

¹⁵ Neelie Kroes, European Commissioner for Competition Policy, Introductory remarks on Final Report of Energy Sector Competition Inquiry, Press Conference, 10 January 2007, SPEECH/07/4 < https://ec.europa.eu/commission/presscorner/detail/en/speech_07_4 > accessed 22 August 2021 (emphasis added).

¹⁶ Mehmet Suat Kayikci, The European Third Energy Package: How Significant for the Liberalisation of Energy Markets in the European Union? (January 14, 2011) < <https://ssrn.com/abstract=2102161> > or < <http://dx.doi.org/10.2139/ssrn.2102161> > accessed 23 July 2021, 1.

¹⁷ Van Bael & Bellis, Competition Law of the European Union (Kluwer Law International, 6th Edition, 2021) ISBN 9789041153982, § 12.12 (1); Damien Geradin, Twenty Years of Liberalization of Network Industries in the European Union: Where Do We Go Now? (November 2006) < <https://ssrn.com/abstract=946796> > accessed 8 September 2021, 2.

¹⁸ Christophe Genoud, Frédéric Varone, Does Privatization Matter? Liberalization and regulation: The case of European electricity, Public Management Review (Volume 4, Issue 2, 2002) 231- 256 < <https://doi.org/10.1080/14616670210130543> > accessed 26 November 2021, 232.

¹⁹ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 173.

1. General Remarks

Energy policy has been on the political agenda on a supranational level since the establishment in the 1950s of the European Coal and Steel Community establishing a common market for coal and steel, passing through soft law, followed by the regulatory framework embodied in the three consecutive energy packages and²⁰ aiming at creating the Energy Union where the idea has been expressed in five consecutive state of the energy union reports²¹.

The Commission acquired competence in the field of energy not until 2009 with the ratification of the TFEU and specifically Art. 194 of it²². Hence, the road to EU-level regulation and policy in the energy sector was paved²³. In the spirit of solidarity, the Member shall act to ensure the functioning of the energy market, to ensure the security of supply, to promote energy efficiency and the renewable source and last but not least to promote the interconnection of energy networks (Art. 194, Para. 1 of the TFEU).

The natural gas market integration can be constituted by means of harmonized enforcement of the relevant regulation across all the Member States resulting in convergence of the policy objectives among the regulators and mutual cooperation among the market incumbents in order to ensure interconnection of the European internal gas market²⁴.

The present chapter contains general observations about the regulatory framework concerning the liberalization policy and the key instruments of the latter which aim to influence the national markets across the Internal energy market. The emergence on the political field of the privatizations and liberalization of the gas sector can be traced

²⁰ Lyapina, The EU Gas Regulations and their Influence on the legislation of the Czech Republic (n 5), 43.

²¹ European Commission, Energy, Topics, Energy strategy, Energy Union < https://ec.europa.eu/energy/topics/energy-strategy/energy-union_en > accessed 27 November 2021.

²² Katja Yafimava, The EU Third Package for Gas and the Gas Target Model: major contentious issues inside and outside the EU, Oxford Institute for Energy Studies, April 2013, NG 75 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2013/04/NG-75.pdf> > accessed 21 July 2021, 2; Schröder, EU Gas Supply Security, A Political Vision of the Southern Gas Corridor (n 8), 34.

²³ Oyewunmi, Energy Security and Gas Supply Regulation in the European Union's Internal Market (n 9), 191.

²⁴ Monica Waloszyk, Possibilities and Limitations for EU Gas Market Integration under the Third Energy Package (2014) *Revista Romana de Drept European* 2014 R.R.D.E., Volume 2014, Issue 3, 175-198 < https://heinonline-org.uaccess.univie.ac.at/HOL/Page?public=true&handle=hein.journals/rianrwioe12&div=36&start-page=175&collection=journals&set_as_cursor=0&men_tab=srchresults > accessed 25 July 2021, 178.

back to the 1980s and 1990s²⁵. The definition of the term privatization has already been given above, while the liberalization policy is defined:

‘as a process of market opening which at a minimum removes legal barriers to trade but in the EU context involves creation of an industrial structure in which competitive forces can work and a competitive ethos can be stimulated’²⁶.

However, the liberalization does not mean deregulation of the sector but rather ‘regulation-for-competition’ that is described as ‘proactive regulation aiming to introduce competition into a formerly monopolistic market structure’²⁷. Liberalization embodies that regulatory approach for competition enhancement²⁸ in economic sectors such as the natural gas one.

Furthermore, the liberalization is a bunch of legislative instruments which can intensify competition and therefore increase the social welfare²⁹. That concept is precepted as increasing competition and at the same time decreasing the influence of state in the industry³⁰. Therefore, the liberalization process is a re-regulation of the sector in order to achieve fair and competitive network industry³¹. Therefore, the liberalization shall not only remove legal barriers on market entry and access but also create legal framework that stimulates the competition³².

Building a functional internal market for energy has been a challenge before the Commission of the European Communities, respectively before the European

²⁵ Nadine Haase, European gas market liberalisation: Are regulatory regimes moving towards convergence?, May 2008, Oxford Institute for Energy Studies, NG 24 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG24-EuropeanGasMarketLiberalisationArerRegulatoryRegimesMovingTowardsConvergence-NadineHaase-2008.pdf> > accessed 19 July 2019, 3.

²⁶ Onur Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market, The Political Economy of the Middle East (Palgrave Macmillan, Singapore, 2020) ISBN 978-981-15-2027-3 (eBook) <https://doi.org/10.1007/978-981-15-2027-3>, 5.

²⁷ Nadine Haase, European Gas Market Liberalisation: Competition versus security of supply, PhD Thesis submitted to University of Twente, (2009, Energy Delta Institute/Castle International Publisher, Groningen, the Netherlands) <http://doc.utwente.nl/61558/1/thesis_N_Haase.pdf > accessed 28 August 2021, 51.

²⁸ Evgenia Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives, (2012) Master Thesis submitted to Central European University, Budapest < http://www.etd.ceu.hu/2012/ivanova_evgenia.pdf > accessed 1 August 2021, 8.

²⁹ Steven Brakman, Charles van Marrewijk, Arjen van Witteloostuijn, Market Liberalization in the European Natural Gas Market The Importance of Capacity Constraints and Efficiency Differences, (CESIFO working paper No. 2697, July 2009) < <https://www.cesifo.org/en/publikationen/2009/working-paper/market-liberalization-european-natural-gas-market-importance> > accessed 18 July 2021.

³⁰ Haase, European Gas Market Liberalisation: Competition versus security of supply (n 27), 49.

³¹ Genoud, Varone, Does Privatization Matter? Liberalization and regulation: The case of European electricity, Public Management Review (n 18), 236.

³² Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 7.

Commission more than 30 years starting in 1988 with the Internal Energy Market Document by the Commission of the European Communities³³.

The liberalization initiative by the Commission through 'targeted regulation'³⁴ can be traced back to 1980s where it envisaged building an internal energy market through interconnection of the systems which would allow increased trade and at the same increased competition and reduction the costs³⁵.

Analyzing the instruments provided for in the three Gas Directives, it is evident that the Commission aims to create a liberalized internal market for gas³⁶. The Commission has gradually achieved its goal in the vast majority of the EU Member States by means of market opening by enabling new entrants on the supply side in the national gas markets and enabling the consumers to choose freely their suppliers³⁷.

The Commission, through the Gas Directives, aims to create a internal gas market in order to hopefully lower the prices and meanwhile increase the security of supply by introducing more competition to the market³⁸.

With regard to accomplishing the aims of the liberalization policy, every of the Gas Directives imposed on the Member States public service obligations. As it was observed by AG Colomer in the Case *Federulity and Others v Autorità per l'energia elettrica e il gas*,

'Liberalisation, if it is not to be at any cost to individuals, makes a certain amount of regulation necessary when the market does not function adequately. Public service obligations constitute a method of structuring that exceptional state interventio[n]'³⁹.

There are several common instruments in all of the liberalization packages by means of which the Commission aims to accomplish the liberalization among the Member States, namely third-party access, unbundling, market opening and national regulatory authority not only at national level but a centralized one at Union level,

³³ Commission of the European Communities, The Internal Energy Market, Commission Working Document (Brussels, 2 May 1988) COM(88) 238 final < <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:51988DC0238&from=EN> > accessed 18 December 2021.

³⁴ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 175.

³⁵ Commission of the European Communities, New Community Energy Objectives, Communication from the Commission to the Council, COM(85) 245 final, (28 May 1985), Recital 35.

³⁶ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 101.

³⁷ *ibid*, 101, 149.

³⁸ Merin Yu, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (2011), Dickinson College Honors Theses. Paper 178 < https://scholar.dickinson.edu/cgi/viewcontent.cgi?article=1177&context=student_honors > accessed 19 July 2021.

³⁹ Case C-265/08, *Federulity and Others v Autorità per l'energia elettrica e il gas*, [2009] ECLI:EU:C:2009:640, Opinion of AG Ruiz-Jarabo Colomer, para 43.

namely ACER. Particularly these instruments were viewed by the Commission as the most powerful tools to remove barriers to competition. While the current chapter will introduce the theoretical side of the legal framework in regard to building the internal gas market, the next one will investigate whether Bulgaria should further develop and re-regulate its national framework in order to create 'barrier-free trading environment'⁴⁰ and attract more market participants. Emphasis will be put on the currently last (third) energy package while giving a general overview on the development and historical background of the consistency the Commission displayed in its willing to accomplish the internal gas market.

However, gas has been within the range of vision of the Commission of the European Community even before the First Energy Package. Namely the 1991 Gas Transit Directive⁴¹ made a 'remarkable' change in the way that the natural gas shall be treated as goods, rather than a public service⁴².

The current chapter aims to give general overview about some of the most important liberalization instruments: (i) market opening; (ii) third-party access (TPA); unbundling and last but not least (iv) national regulatory authority (NRA) which were embodied in the consecutive energy packages in order to build a well-functioning internal energy market and are common for both gas, and electricity legislative framework. However, every instrument will be discussed with regard to natural gas sector. Moreover, other aspects of the liberalization will be touched upon since they also play significant role in achieving that goal.

At national level, the government and the parliament are the two important authorities that set the legal framework for the liberalization in the sector, while the national regulator monitors the process and implements the regulation design⁴³.

Viewed from other perspective, liberalization is also a form of deregulation since it allows competition to occur which affects in highest degree the natural monopolies⁴⁴.

⁴⁰ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 10.

⁴¹ Council Directive 91/296/EEC of 31 May 1991 on the transit of natural gas through grids, OJ L 147, 12.06.1991, 0037-0040.

⁴² Sandu-Daniel Kopp, Politics, Markets and EU Gas Supply Security Case Studies of the UK and Germany, Energy Policy and Climate Protection (Springer Fachmedien Wiesbaden 2015) ISBN 978-3-658-08324-3 (eBook), 73.

⁴³ Lucia A Reisch, Hans-W. Micklitz, Consumers and deregulation of the electricity market in Germany, Journal of Consumer Policy (Volume 29, Issue 4, 2006) 399 – 415 < <https://doi.org/10.1007/s10603-006-9016-z> > accessed 9 November 2021, 400.

⁴⁴ *ibid*, 405.

2. First Energy Package

In Directive 98/30/EC⁴⁵ ('First Gas Directive', '1998 Gas Directive') the Commission established common rules for natural gas trade on the internal market. The Directive is part of the first set of legislative measures in the field of energy which aimed at liberalizing the energy markets across the Union.

Namely the First Gas Directive set the tone for liberalization of the sector and its transformation in order to increase market competitiveness⁴⁶. The First Gas Directive was viewed by the Commission as a tool to remove legal, physical and economic barriers to competition in the sector.⁴⁷

2.1 Market Opening

Taking into account the reasoning behind the liberalization, market opening has been a crucial instrument established with the First Gas Directive and that is the reason it has been put as a first key liberalization instrument to be considered when discussing the First Energy Package. Thus, freedom of choice of gas suppliers for the eligible customers was believed to be key element⁴⁸. These 'eligible customers' were viewed as a tool to facilitate the desired gas market opening⁴⁹. By the virtue of Art. 18, Para. 9 of the First Gas Directive, Member States shall establish and publish annually the criteria for the definition of the 'eligible customers' and shall notify them to the Commission for their publication in the Official Journal.

Through the 1998 Gas Directive the European Community has focused on the gradual market opening in the gas industry. Commonly, before the liberalization activity, across the European Communities, respectively European Union, the natural gas sector has been in control of state-owned incumbents which *de jure* or *de facto* governed the production, import, supply and distribution of natural gas⁵⁰. Namely the same incumbents used to be usually the grid owners and thus controlled the transmission too and therefore, by operating the supply and transmission, these entities used their

⁴⁵ Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas, OJ L204, 21.07.1998, 0001-0012.

⁴⁶ Lyapina, The EU Gas Regulations and their Influence on the legislation of the Czech Republic (n 5), 43.

⁴⁷ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 150.

⁴⁸ Commission of the European Communities, Opening Up To Choice Launching the single European gas market, 2000 < <https://op.europa.eu/en/publication-detail/-/publication/a9ec7a03-668a-44b4-8a16-286cb74497c3/language-en/format-PDF/source-search> > accessed 5 September 2021, 6.

⁴⁹ Haase, European gas market liberalisation: Are regulatory regimes moving towards convergence? (n 25), 48.

⁵⁰ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 149.

position to block access to networks and respectively weaken the competition on the particular market⁵¹.

Therefore, the Commission addressed the Member States which were obliged to gradually open the market by enabling 'eligible customers' to freely choose their suppliers. In accordance with Art. 18, Para. 2, the term 'eligible customers' comprises:

- (i) 'gas-fired power generators, irrespective of their annual consumption level; however, and in order to safeguard the balance of their electricity market, the Member States may introduce a threshold, which may not exceed the level envisaged for other final customers, for the eligibility of combined heat and power producers. Such thresholds shall be notified to the Commission,'
- (ii) 'other final customers consuming more than 25 million cubic metres of gas per year on a consumption-site basis.'

and namely these were used by the Commission as a determinant to set up legal market opening in the natural gas industry. Nevertheless, Member States should have designated such eligible customers within their territories. Analyzing the provision of Art. 18 of the 1998 Gas Directive, it can be deduced that the Commission desired gradual market opening over a ten-year period rather than abrupt transition to open market⁵². The Directive prescribes three phases of market opening, namely (i) first phase shall be completed as from August 2000 where the eligible customers referred to as above mentioned shall be specified and this should have resulted in market opening shall be at least 20% of the retail market on a year basis (Art. 18, Para. 3 of the 1998 Gas Directive); (ii) the second phase prescribes that as from August 2003 the market opening shall be at least 28 % due to the lower threshold for a customer to be specified as an eligible one, namely 15 mcm annual gas consumption (Art. 18, Para. 6, first indent, read in conjunction with Art. 18, Para. 4 of the 1998 Gas Directive); and (iii) third phase which foresees that as from August 2008 consumer with more than 5 mcm annual gas consumption can be specified as eligible and respectively have free choice (Art. 18, Para. 6, first indent, read in conjunction with Art. 18, Para. 4 of the 1998 Gas Directive).⁵³

⁵¹ *ibid.*

⁵² United States International Trade Commission (USITC), Natural Gas Services Recent Reforms in Selected Markets, Investigation No. 332-426, Publication 3458 (October 2001) <<https://www.usitc.gov/publications/332/pub3458.pdf>> accessed 5 September 2021, 10-2, Box 10-1.

⁵³ Commission of the European Communities, Opening Up To Choice Launching the single European gas market (n 48), 6; Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 78-79.

2.2 Third Party Access

In certain circumstances undertakings operating in the energy sector should have a legally enforceable right to access and use network facilities owned by other companies. In energy market context that right is construed as a third-party access and emerged at EU level in light of the competition law of the EU⁵⁴.

Third-party access (TPA), based on the three energy packages, shall be construed as a non-discriminatory access and tariff rules for the transmission network, storage and LNG facilities of market incumbents other than the network owner⁵⁵.

It is the right of producers, importers, suppliers, eligible customers and distribution operators to be enabled to use the gas networks of the transmission and distribution operators⁵⁶. In general, that non-discriminatory access to the gas grid is granted to the entire chain: from the production, through import and supply to local retail distribution⁵⁷.

Moreover, the gas transport networks are considered natural monopoly in the competition law settled case-law⁵⁸ since reproducing the same delivery infrastructure is associated with financial risks, investment costs and lengthy administrative procedure and construction process and usually is not economically viable based on the consumer demand⁵⁹.

⁵⁴ Aleksander Kotlowski, Third-party Access Rights in the Energy Sector: A Competition Law Perspective, *Utilities Law Review* (Volume 16, Issue 3, 2006/2007), 101-109 < <https://ssrn.com/abstract=1073962> > accessed 28 December 2021, 101.

⁵⁵ Alberto Cavaliere, *The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy*, Oxford Institute for Energy Studies, May 2007, OIES Paper: NG 20 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG20-TheLiberlizationofNaturalGasMarketsRegulatoryReformAnCompetitionFailuresInItaly-AlbertoCavaliere-2007.pdf> > accessed 25 July 2021, 8.

⁵⁶ Jones, *EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union* (n 10), 176.

⁵⁷ Commission of the European Communities, *Opening Up To Choice Launching the single European gas market* (n 48), 8.

⁵⁸ Commission Decision of 4.5.2010 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement, Case COMP/39.317 – *E.ON Gas* (Brussels, 4.5.2010) C(2010) 2863 final < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39317/39317_1942_3.pdf > accessed 7 December 2021, Rec. 18.

⁵⁹ European Commission, Commission Decision of 17.12.2018 relating to proceedings under Article 102 of the Treaty on the Functioning of the European Union (AT.39849 – *BEH Gas*) (Brussels, 17.12.2018), C(2018) 8806 final, Public version < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39849/39849_2692_4.pdf > accessed 3 December 2021, Rec. 335.

Although the 1991 Gas Transit Directive⁶⁰ was viewed as a tool to set up ‘procedural framework’ for transit negotiation, it did not provide specific right to access the gas grid⁶¹.

Therefore, the instrument of ‘third-party access’ was introduced by the First Energy package within the 1998 Gas Directive. The third-party access stems from the so-called essential facilities doctrine. Transmission, storage, LNG and distribution facilities are considered to be ‘essential’⁶² among both academics and practitioners. As Advocate General Jacobs found in *Oscar Bronner* landmark Case,

‘a company which has a dominant position in the provision of facilities which are essential for the supply of goods or services on another market abuses its dominant position where, without objective justification, it refuses access to those facilities. Thus in certain cases a dominant undertaking must not merely refrain from anti-competitive action but must actively promote competition by allowing potential competitors access to the facilities which it has developed.’⁶³

The gas market is dependent on the transportation infrastructure since namely that infrastructure is essential for competition in that market⁶⁴. Hence, the ‘essential facilities doctrine’ plays its crucial role to enable the third parties to access to the physical infrastructure necessary for delivering natural gas⁶⁵. The doctrine imposes an obligation of the essential facility owner to deal with its competitors since a refusal to deal could constitute abuse of dominant position within the meaning of Art. 102 of the TFEU⁶⁶.

However, since the Judgement of the Court of Justice in *Bronner* Case was adopted in 1998⁶⁷, the roots of the essential facility doctrine applied to the energy law shall be found earlier in the ‘pre-*Bronner*’ time⁶⁸ and examine what has inspired the

⁶⁰ Council Directive 91/296/EEC of 31 May 1991 on the transit of natural gas through grids, OJ L 147, 12.6.1991, 37-40.

⁶¹ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 176.

⁶² Cavaliere, The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy (n 55), 6, 12.

⁶³ C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG*, Opinion of AG Jacobs [1998] ECLI:EU:C:1998:264, para 34.

⁶⁴ Kim Talus, Introduction to EU Energy Law (Oxford University Press, 2016) ISBN 978-0-19-879181-2 (hbk.), ISBN 978-0-19-879182-9 (pbk.), 19.

⁶⁵ Richard Whish, David Bailey, Competition Law (Oxford University Press, Ninth Edition, 2018) ISBN 978-0-19-877906-3, 1009.

⁶⁶ Sébastien J. Evrard, Essential Facilities in the European Union: Bronner and beyond, Columbia Journal of European Law (Volume 10, Issue 3, 1 March 2004) < <https://www.jonesday.com/files/Publication/e2d79ea9-8440-49e6-a879-c834f4b0b557/Presentation/PublicationAttachment/9cf89b02-295b-43cf-8a00-3cbea13a85bf/Article%20essential%20facilities.pdf> > accessed 24 December 2021, 1.

⁶⁷ C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECLI:EU:C:1998:569

⁶⁸ Evrard, Essential Facilities in the European Union: Bronner and beyond (n 66), 2.

Commission to introduce the duty to deal with respect of the owners and/or operators of network grids with third parties in order to enhance the competition in the energy market.

The 'essential facilities doctrine' finds its roots across the ocean – in the US in the beginning of the 20th century as a variation of the principle 'refusal to deal'⁶⁹ coming from the antitrust law. The Commission used the term 'essential facility' in 1992 in its decision in Case AT.34174 *Sealink/B&I - Holyhead*⁷⁰. The term 'essential facility' is also defined in a soft-law competition law instrument as 'facility or infrastructure which is essential for reaching customers and/or enabling competitors to carry on their business, and which cannot be replicated by any reasonable means'⁷¹.

Taking into account the circumstances, that natural gas is treated as goods as any other and that usually network based industries were characterized with national champions which operated the grids, besides the production, import and supply, it is understandable why not only the Commission but authors also refer to the essential facilities' doctrine as a root for the third-party access.

The development of the essential facilities doctrine coincided with the liberalization policy of the network industries. Due to the asserted natural monopoly characteristics of the gas transportation networks, they are considered essential facilities and accessing them is allowing the effective competition in the market since there is lack of economic viability to duplicate these networks⁷². Therefore, the third-party access instrument of the liberalization policy reflects the essential facilities doctrine⁷³.

Being a gas producer or a trader, it is important being granted an access to such infrastructure since the transportation grid makes it possible the gas to reach its final customers, especially in events where the network owner and/or operator maintain(s)

⁶⁹ *ibid*, 1, 2.

⁷⁰ Commission Decision of 11 June 1992 relating to a proceeding under Article 86 of the EEC Treaty (IV/34.174 – *Sealink/B&I – Holyhead: interim measures*) < https://ec.europa.eu/competition/antitrust/cases/dec_docs/34174/34174_2_2.pdf > accessed 28 December 2021, Rec. 41.

⁷¹ Notice on the application of the competition rules to access agreements in the telecommunications sector, Framework, Relevant Markets and Principles, OJ C 265, 22.8.1988, 2-28, Rec. 68.

⁷² Christopher Jones, *EU Energy Law Volume II: EU Competition Law and Energy Markets* (Claeys & Casteels, 5th edition [S.I.], 2019) ISBN ebook: 9789077644683, 302, 3.384.

⁷³ *ibid*, 302, 3.385.

tight business relation with gas suppliers and usually the former is inclined to avoid abiding by its duty to grant access⁷⁴.

As it was stressed out by the Commission of the European Communities, in order to have competitive market, gas undertakings and/or eligible customers shall have access to the transmission and any other transportation facilities in order to have the gas transported which they had bought from their freely chosen supplier⁷⁵. A third-party access is needed where those gas undertakings and/or eligible customers do not own the gas system to which they need access. Usually where an undertaking only operates the pipeline system and does not own it, nor it acts as a supplier or producer/importer, the only revenue that undertaking gets is the profit from allowing 'third parties' access to their network so the latter can have the gas transported which they have purchased. Thus said, one can understand the close connection between the TPA and unbundling and their interaction with the market opening, all of them instruments of liberalization policy.

Thus, the First Gas Directive addresses the Member States which have to provide access to the gas transmission system and prescribes two types of access, namely negotiated access (Art. 15 of the 1998 Gas Directive) and regulated access (Art. 16 of that Directive)⁷⁶. Art. 14 of the Directive enables Member States to choose one or both types of TPA. Furthermore, the addressed Member States shall abide by the principles of objectivity, transparency and non-discrimination with regard to the granting of a TPA.

While the First Gas Directive focused only to transmission facilities, both Second and Third Gas Directives included TPA to storage and LNG facilities too, which will be further discussed in details beneath in the current chapter.

It is believed that the First Gas Directive only gives the 'objective and idea' of the TPA, rather than aiming to achieve implementation across the European Communities⁷⁷,

⁷⁴ Michail D Diathessopoulos, Competition Law and Sector Regulation in the European Energy Market after the Third Energy Package: Hierarchy and Efficiency (March 20, 2012). University of Cambridge Faculty of Law Research Paper < <https://ssrn.com/abstract=2026607> > accessed 18 July 2021, 38.

⁷⁵ Commission of the European Communities, Opening Up To Choice Launching the single European gas market (n 48), 8; Brakman, van Marrewijk, van Witteloostuijn, Market Liberalization in the European Natural Gas Market The Importance of Capacity Constraints and Efficiency Differences (n 29), 8.

⁷⁶ Cavaliere, The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy (n 55), 8.

⁷⁷ Haase, European gas market liberalisation: Are regulatory regimes moving towards convergence? (n 25), 48.

because in terms of effectiveness the provisions remained at level of recommendations regarding the terms and condition for the organizational part of the access to the transmission system⁷⁸.

In accordance with Art. 15 of the First Gas Directive the negotiated third-party access (nTPA) relies on negotiation in good faith and subsequently on commercial agreements between the parties and publication of the main commercial conditions for the use of the transmission system *ex ante*⁷⁹. Under that option, the precise terms are determined in the course of negotiations⁸⁰.

Nevertheless, Art. 16 of the Directive obliges Member States in case of relying on regulated third-party access (rTPA) to guarantee the access on the basis of published tariffs and other terms and obligations for the use of the transmission system⁸¹.

These two types prescribed by the Directive gave the Member States flexibility to some extent and free choice⁸² about the TPA regime to opt for.

Both types have their downsides in terms of abiding by the principle of non-discrimination. While the rTPA prescribes *ex ante* control in terms of non-discriminatory tariffs, it requires regulatory agency which plays role in assessing the fairness of terms, the nTPA leaves the precise terms to the negotiation process, but still the non-discrimination will be assessed *ex post*⁸³ since charging higher prices to competitors is not precluded.

Another important aspect of the TPA is the refusal of access to the transmission system prescribed by Art. 17, Para. 1 of the First Gas Directive. Gas undertakings may refuse

⁷⁸ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 84.

⁷⁹ Commission of the European Communities, Opening Up To Choice Launching the single European gas market (n 48), 8; Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 84; Anton Ming-Zhi Gao, Regulating Gas Liberalisation A Comparative Study on Unbundling and Open Access Regime in the US, Europe, Japan, South Korea and Taiwan, Energy and Environmental Law & Policy Series Supranational and Comparative Aspects, Volume 14 (Kluwer Law International, 2010) web-ISBN 978-90-411-4808-7 <<https://wkldigitalbooks.integra.co.in/Customer/Home/BookDetails?TitleGUID=24849264-C098-4267-B7C0-A9E28D519E30>> accessed 1 August 2021, 155.

⁸⁰ Brakman, van Marrewijk, van Witteloostuijn, Market Liberalization in the European Natural Gas Market The Importance of Capacity Constraints and Efficiency Differences (n 29), 9.

⁸¹ Commission of the European Communities, Opening Up To Choice Launching the single European gas market (n 48), 8; Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 84.

⁸² Ming-Zhi Gao, Regulating Gas Liberalisation A Comparative Study on Unbundling and Open Access Regime in the US, Europe, Japan, South Korea and Taiwan (n 79), 155.

⁸³ Yu, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (n 38).

access where a lack of capacity exist or where such undertakings would be prevented from carrying out the public-service obligations imposed by Art. 3, Para. 2 or where financial and economic difficulties would occur stemming from obligations on take-or-pay contracts with regard to the procedure stipulated by Art. 25 of the Directive.

2.3 Unbundling

In accordance with the non-discrimination principle, effective competition in the gas sector requires a TPA to the network, but as highlighted above, the networks were operated by natural monopolies, which vertically had in control the production and/or import, transmission, supply and retail sale⁸⁴.

In order to ensure the non-discrimination in terms of access to networks and fairness of the tariffs, the Gas Directives introduced the instrument of unbundling of vertical integration⁸⁵. Exactly an appropriate unbundling regime prevents gas undertaking to provide preferential and discriminatory access to the market to their affiliated entities⁸⁶.

The term 'vertically integrated undertaking' finds its legal definition in Art. 2, p. 16 of the 1998 Gas Directive, namely 'natural gas undertaking performing two or more of the tasks of production, transmission, distribution, supply or storage of natural gas'.

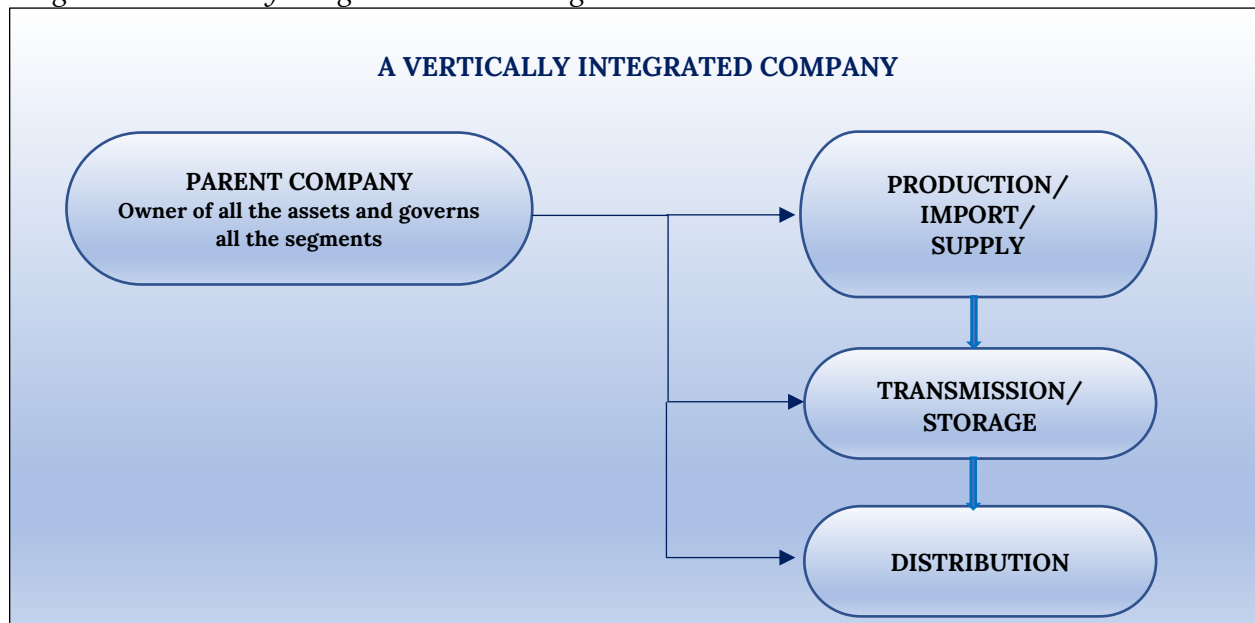
The figure below illustrates how these VIUs work.

⁸⁴ Christopher Jones, EU Energy Law Volume I The Internal Energy Market (Claeys & Casteels Publishing, 2016, 4th Edition) ISBN 9789491673436, 91, 4.1.

⁸⁵ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 71.

⁸⁶ Ming-Zhi Gao, Regulating Gas Liberalisation A Comparative Study on Unbundling and Open Access Regime in the US, Europe, Japan, South Korea and Taiwan (n 79), 102.

Figure 1: Vertically integrated undertaking



Source: Christopher Jones, EU Energy Law Volume I The Internal Energy Market (Claeys & Casteels Publishing, 2016, 4th Edition)

It is appropriate, first of all, to name the different types of unbundling that the literature recognizes. There are four main forms of unbundling and they represent the approach of the liberalization policy in terms of prevention of the formation of VIUs across national gas markets in the Member States, namely⁸⁷:

- (i) accounting unbundling, which is defined as the weakest form and prescribes separate accounts for the different segments of the VIU's business;
- (ii) management (functional) unbundling requires separate accounts, respectively independent organization and decision-making of the transmission from the other business segments and moreover, commercially sensitive information unavailable on the market shall not be used across the integrated business segments for gaining competitive advantage;
- (iii) legal unbundling promotes separate and individual management and decision-making for each particular business segment of the integrated undertaking irrespectively whether carried out in separate legal entities;

⁸⁷ Christopher Jones, EU Energy Law Volume I The Internal Energy Market 4th Edition (n 84), 93-94, 4.6; Francesca Conte, Lawrence Irlam, Horses for Courses? Cross-Country Comparison of European Gas Market Liberalisation (June 2005) < <https://www.slideshare.net/FrancescaConte/crosscountry-comparison-of-european-gas-market-liberalization> > accessed 9 September 2021, 6; Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 71-72.

(iv) ownership unbundling, which is the most advanced form of unbundling and considered as the most effective one by the Commission⁸⁸, prescribes that the entities involved in transmission have separate ownership from the entities carrying out other business segments which results in complete legal and operational separation too.

The First Gas Directive provides for the lightest unbundling regime of the VIUs⁸⁹ namely accounting unbundling. Art. 13, Para. 3 provides for separate accounts, while Para. 1 of that article obliges the publishing of that annual accounts. As it will be observed, the Commission had undertaken stricter approach to the unbundling regime in the other two energy packages.

2.4 National Regulatory Authority

As previously mentioned, gas networks are an essential facility for transporting the goods (gas), and thus regulatory monitoring is necessary to ensure not only the non-discriminatory access to the networks but the fairness of the tariffs for transportation⁹⁰.

The First Gas Directive did not oblige Member States to establish and designate a national regulatory authority (Art. 21, Para. 3 and Art. 23, Para. 3) but still it provided for designation of a competent authority for settling disputes arisen in negotiations on the access to the system and in cases of refusal of access.

2.5 Concluding Remarks

First Gas Directive set the foundations of the Commission's approach and will to build competitive national gas markets part of the internal energy market, which can be deduced from Rec. 3, read in conjunction with Rec. 1 of the First Gas Directive.

Despite that, it is considered that the first package set out only general principles and thus the Member States had a great margin of discretion and maneuvering in implementing the Directive and respectively building national legal framework. Moreover, the outcome has been that some markets become more open and competitive than others and thus 'intra EU-diversity' emerges. That outcome required

⁸⁸ Commission of the European Communities, Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (Final Report), 10.1.2007, COM(2006) 851 final, Rec. 55.

⁸⁹ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 72.

⁹⁰ Christopher Jones, EU Energy Law Volume I The Internal Energy Market 4th Edition (n 84), 229, 6.1.

further measures with regard to the access not only to network but to storage facilities, interoperability between states, tariffs and market opening⁹¹.

3. Second Energy Package

Under the Second Energy Package (SEP), it is evident that the approach of the Commission has been to tackle the barriers preventing the well-functioning and competitive gas market⁹². Relevant for the gas industry from the SEP are Directive 2003/55/EC⁹³ ('Second Gas Directive', '2003 Gas. Directive) and Regulation (EC) 1775/2005⁹⁴.

In order to fulfil the goals had set, the Commission has taken approach to deepen the reforms in liberalization policy started with the First Gas Directive but still ensuring level-playing field across the Member States. The Second Gas Directive is also referred to as the Acceleration Directive.

It is evident from Rec. 2 of the 2003 Gas Directive, that the Commission declared the objectives of the desired reform, namely market efficiency, lower prices, quality service and competitiveness. However, it was acknowledged that the liberalization policy lacked success in terms of ensuring level-playing field, mitigating the risk of market dominance and non-discrimination concerning the TPA based on monitored tariffs.

3.1 Market Opening

Regarding the market opening, the Second Gas Directive introduced a huge advancement. Although the 2003 Gas Directive did not amend the definition behind the term 'eligible customers', it expanded the market opening from 'designated' eligible customers to all customers in the course of three phases (Art. 23, Para. 1): (i) the first phase prescribes that until 1 July 2004 eligible customers are those under the meaning of Art. 18 of the 1998 Gas Directive; (ii) the second phase prescribes that from

⁹¹ Susanna Quadri, 'EU Energy Market Integration through Energy Union: A New Holistic Approach' (June 2016) Bocconi Legal Papers Number 7, 1-16, 3; Brakman, van Marrewijk, van Witteloostuijn, Market Liberalization in the European Natural Gas Market The Importance of Capacity Constraints and Efficiency Differences (n 29), 10.

⁹² Regulation (EC) No 1775/2005 of the European Parliament and of the Council of 28 September 2005 on conditions for access to the natural gas transmission networks, OJ L 289, 03.11.2005, 1-13, Rec. 1.

⁹³ Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC, OJ L 176, 15.07.2003, 57-78.

⁹⁴ Regulation (EC) No 1775/2005 of the European Parliament and of the Council of 28 September 2005 on conditions for access to the natural gas transmission networks, OJ L 289, 03.11.2005, 1-13.

1 July 2004, eligible customer under the meaning of the Directive were all non-household customers and (iii) the third phase provides that from 1 July 2007 all customers are eligible ones and could enjoy the benefits of the market openness. In result of the full market opening, all customers could benefit from the principles of consumer protection, security of supply, quality and transparency provided for in Art. 3 of the Directive⁹⁵.

3.2 Third Party Access

The Second Gas Directive introduced also radical improvement and changes with regard to the TPA compared to the First Gas Directive.

First of all, it is notable that the 2003 Gas Directive abolished the nTPA option and prescribed the rTPA as a default and only available option to great extent. Analyzing Art. 18 of the Directive, the Commission approached for *ex ante* control by published tariffs and prior published methodologies which are to be approved by the designated regulatory authority.

Moreover, the Second Gas Directive, in Art. 19 of it, introduced the TPA to storage facilities which were not covered by the First Gas Directive. The access to storage facilities is a great advancement and meanwhile vitally important for the gas suppliers in order to manage seasonal fluctuations in gas consumption, particularly at peak^{96 97}. Moreover, new entrants, usually do not have wide portfolio or flexibility in term of supply sources and the access to storage facilities would allow them to secure their customers' supply⁹⁸ and moreover, to allow a gas supplier to remain active on the gas wholesale and/or retail markets, so that the seasonal fluctuation in customers' demand to be managed in an optimal way⁹⁹. Any supply shortage would ruin their reputation and prevent them from ensuring consumer switching, so storage capacity could play important role and can to some extent constitute an entry barrier. However, there are contradictory views where some authors do not consider storage facilities as

⁹⁵ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 79.

⁹⁶ *ibid* 85; Cavaliere, The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy (n 55), 18, 19.

⁹⁷ In general, local heating companies are among the consumers with highest consumption on the Bulgarian gas market and thus, their consumption fluctuates during the year and they consummate more energy, respectively natural gas in the winter compared to the summer based on the weather conditions.

⁹⁸ Cavaliere, The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy (n 55), 18.

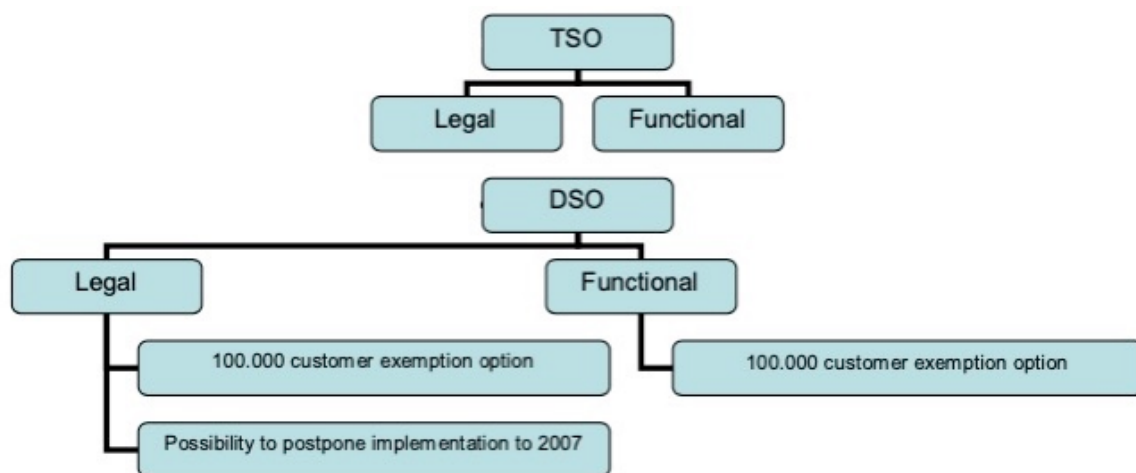
⁹⁹ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 339.

natural monopoly and therefore, the storage is not an essential facility¹⁰⁰, while particularly in the case of Bulgaria where there is only one storage facility, the Commission acknowledged the ‘natural monopoly’ character of the gas storage facility Chiren¹⁰¹.

Similar to the approach introduced by the First Gas Directive, with regard to the access to storage facilities, linepack and ancillary services¹⁰², Member States are enabled to opt for a nTPA and/or a rTPA. Art. 19, Para. 3 of the Second Gas Directive prescribes that the nTPA requires negotiation in good faith, based at first, on objectivity, transparency and non-discrimination (Art. 19, Para 1 of the Second Gas Directive) and second, on prior published annually commercial conditions for use. In accordance with Art. 19, Para. 4 of the Second Gas Directive the rTPA is based on published tariffs and/or other terms and obligations for use¹⁰³.

3.3 Unbundling

Figure 2: Unbundling of TSO and DSO under the SEP



Source: Gómez-Acebo & Pombo Abogados, S.L., Charles Russell LLP, Unbundling of Electricity and Gas Transmission and Distribution System Operator Final Report (1 December 2005), 18

Major advancement was made with regard to the unbundling by the Second Gas Directive. It introduced subsequently unbundling of the transmission system

¹⁰⁰ Cavaliere, *The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy* (n 55), 18-19; Commission of the European Communities, *Communication from the Commission to the Council and the European Parliament, Prospects for the internal gas and electricity market* (Brussels, 10.1.2007) COM(2006) 841 final, 16, 2.3.3.

¹⁰¹ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 628.

¹⁰² By the virtue of Art. 25, Para. 1, p. (f) the national regulatory authority is responsible for monitoring the access conditions to storage, linepack and other ancillary services.

¹⁰³ By the virtue of Art. 25, Para. 2, p. (a) the national regulatory authority is responsible for fixing the methodologies used for calculation and establishment the terms and conditions for access to network.

operators (Art. 9 of the Second Gas Directive) and of the distribution system operators (Art. 13 of the Directive) from the rest of the sector segments¹⁰⁴. While the 1998 Gas Directive used the terms ‘transmission undertaking’ and ‘distribution undertaking’, the 2003 Gas Directive introduced the terms ‘transmission system operator’ (TSO) which is defined as

‘[a] natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transportation of gas;’ (Art. 2(4) of the Directive)

and ‘distribution system operator’ (DSO), which is defined as

‘a natural or legal person who carries out the function of distribution and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the distribution system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the distribution of gas;’ (Art. 2(6) of the Directive).

Both operator types are obliged to establish a compliance programme in order to exclude any discriminatory conduct (Art. 9, Para. 2, p. (d) and Art. 13, Para. 2, p. (d) of the Directive).

The Directive introduced three of the four types of unbundling mentioned above, namely legal, functional and accounting unbundling¹⁰⁵. The Directive explicitly prescribes that ‘ownership’ separation is not a prerequisite for compliance with the unbundling regime (Art. 9, Para. 1, last sentence and Art. 13, Para.1, last sentence) and thus the ownership unbundling is not prescribed by the Directive.

The rationale behind legal and functional unbundling as further advanced approach is separation of transmission and distribution from all other segments on the gas market and simultaneously ensuring their independence from the vertically integrated entity¹⁰⁶, which can be easily deduced from the wording of Art. 9, Para. 1 and Art. 13, Para. 1 of the Directive. Moreover, Art. 17 of the Directive prescribes accounting unbundling for each segment among transmission, distribution, LNG and storage facilities.

However, Art. 13 provides for option of exemption to the unbundling of the DSOs where they serve less than 100 000 connected customers. With regard to the

¹⁰⁴ Kayikci, *The European Third Energy Package: How Significant for the Liberalisation of Energy Markets in the European Union?* (n 16), 4.

¹⁰⁵ Note of DG Energy & Transport on Directive 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas *The unbundling regime* (16.01.2004), 1.

¹⁰⁶ Demir, *Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market* (n 26), 73.

unbundling, the Second Gas Directive prescribed also a postponement option of unbundling until July 2007 (Art. 33, Para. 2 of the Directive).

3.4 National Regulatory Agency

Compared to the 1998 Gas Directive, the 2003 Gas Directive obliged Member States to designate one or more competent bodies to carry out the functions of regulatory authority (Art. 25, Para. 1 of the Directive).

Important aspect of the regulatory agency is its independence of the interest of the gas market incumbents. In general, the Second Gas Directive took the approach of ‘one-stop shop’, namely one single authority is granted all the competence under the Directive¹⁰⁷.

Furthermore, contrary to the Third Gas Directive, the Second Gas Directive did not provide for complete separation of the NRAs from the government¹⁰⁸ which is easily deduced from the relative provisions of the 2003 and 2009 Gas Directives where Art. 25, Para. 1 of the 2003 Gas Directive prescribes for independence from the gas industry while Art. 39, Para. 4, p.(a) of the 2009 Gas Directive prescribes for an independence from any public or private entity. The Second Gas Directive, similar to the previous one, assigned to the particular regulatory authority core responsibilities such as licensing the particular market activities (Art. 4 of both Directives). Nevertheless, the Second Gas Directive added further responsibilities in the form of monitoring and intervention where necessary, namely:

- the rules on the management and allocation of interconnection capacity (Art. 25, Para. 1, p. (a));
- mechanisms to deal with congestion of capacity of the national grid system (Art. 25, Para. 1, p. (b));
- time taken by TSOs and DSOs to make connections and repairs and the publication of appropriate information by them with regard to interconnectors (Art. 25, Para. 1, p. (c) and (d));
- effective accounting unbundling to prevent from cross-subsidies (Art. 25, Para. 1, p. (e));
- TPA and compliance of the TSOs and DSOs with the Directive (Art. 25, Para. 1, p. (f) and (g));
- the level of transparency and competition (Art. 25, Para. 1, p. (h) in conjunction with Para. 8);

3.5 New infrastructures

A major advancement of the 2003 Gas Directive is the full or partial exemption, upon request, of new gas infrastructure from TPA and access to storage facilities by the competent regulatory authority when certain criteria are met. Emphasis is put on the

¹⁰⁷ Christopher Jones, EU Energy Law Volume I The Internal Energy Market 4th Edition (n 84), 233, 6.14.

¹⁰⁸ *ibid*, 236, 6.25.

enhancement of competition and security of supply by means of that new infrastructure (Art. 22, Para. 1, p. (a) of the Directive) and that provision of the Directive is seen as a ‘risk mitigation’ for new infrastructures¹⁰⁹. Nonetheless, the risk attached to the investment would prevent the latter if an exemption is not granted (Art. 22, Para. 1, p. (b) of the Directive). Moreover, when assessing on case-by-case basis, the national regulatory authority shall aim to strike a balance between promoting new infrastructure investment and enhancing competition based on a fair, non-discriminatory access to infrastructure networks¹¹⁰, taking into account that the TPA is one of the key liberalization instruments.

3.6 Concluding Remarks

Thus said, the Second Energy Package introduced advancement in fulfilling the aim of building liberalized and competitive market for gas in EU. A rTPA as a default option, designation of regulatory authorities at national level and unbundling, in particular legal unbundling, are among the major advancements introduced in 2003 with regard to the liberalization goal. Thus, TSOs and DSOs were provided with tools to booster their efficiency¹¹¹ being separated from the supply segment. In general, more stringent rules in terms of unbundling, regulation of TPA and designation of NRA were among the advancements of the Second Energy Package to tackle the inefficiencies of its predecessor¹¹².

4. Energy Sector Inquiry

Due to the view that the gas market was still monopolized by its incumbents, the Commission launched in 2005 a sector inquiry in accordance with its competence by the virtue of Art. 17 of the Regulation (EC) No 1/2003¹¹³ aiming to investigate and distinguish the barriers impeding the well-functioning, competitive and open gas

¹⁰⁹ Anne-Sophie Corbeau, Dennis Volk, Jonathan Sinton, Julie Jiang, Jiang Ping, Tammy Teng, Li Boshu and Yue Fen, Gas Pricing and Regulation China’s Challenges and IEA Experience, (OECD/IEA, 2012), 49.

¹¹⁰ Commission of the European Communities, Commission staff working document on Article 22 of Directive 2003/55/EC concerning common rules for the internal market in natural gas and Article 7 of Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity – New Infrastructure Exemptions –, SEC (2009) 642 final, Rec. (11).

¹¹¹ Christian Egenhofer, Kyriakos Gialoglou, Rethinking the EU Regulatory Strategy for the Internal Energy Market, CEPS Task Force Report No. 52 (December 2004) < <https://www.ceps.eu/ceps-publications/rethinking-eu-regulatory-strategy-internal-energy-market/> > accessed 4 October 2021, 24.

¹¹² Diathessopoulos, Competition Law and Sector Regulation in the European Energy Market after the Third Energy Package: Hierarchy and Efficiency (n 74), 1.

¹¹³ Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003, 1-25.

market which still was not ensuring low prices for the final consumers and secure market supply¹¹⁴.

Since first two packages did not provide the results envisaged by the Commission, the latter used its most powerful tool – competition law – in order to implement the Internal Energy Market¹¹⁵.

Due to the Sector Inquiry the following main findings were made¹¹⁶:

(i) the markets remained with high level of market concentration where dominant incumbents retained its position of the pre-liberalization period and thus enabled to exercise their market power;

(ii) the level of unbundling played negative role on the market functioning and incentives in network investments which hindered new players to enter the market and threatened the security of supply; vertical integration was seen also as an obstacle for liquidity of the markets;

(iii) limited cross-border connection, primary capacity controlled by VIUs based on pre-liberalization era long-term contracts and ineffective congestion management mechanisms limited the competitive constraint and hampered market integration;

(iv) lack of transparency due to the information asymmetry between VIUs and their competitors in terms of reliance on and timing of that information;

(v) effective and transparent price formation on gas hubs that follows the market-based pricing mechanism is urgent to ensure market liquidity;

(vi) retail market lacked competition mainly due to the high level of market concentration;

(vii) balancing markets usually favour incumbents and thus create obstacles for market entries; balancing zones were usually too small and too numerous¹¹⁷;

¹¹⁴ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 320.

¹¹⁵ Yafimava, The EU Third Package for Gas and the Gas Target Model: major contentious issues inside and outside the EU (n 22), 3.

¹¹⁶ Commission of the European Communities, Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (n 88), 5-9, Rec. 14-39.

¹¹⁷ Commission of the European Communities, Commission Staff Working Document Accompanying the Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (Final Report), SEC(2006) 1724/2, Volume III, 245-246.

(viii) LNG widens the upstream suppliers' portfolios and thus is important not only for competition on upstream level but for security of supply in terms of diversification;

Based on these findings, the Commission identified the following key issues to be addressed with regard to the malfunctioning of the energy markets, namely¹¹⁸:

- (i) structural conflicts of interest caused by insufficient unbundling;
- (ii) regulatory gap, in particular for cross-border issues;
- (iii) lack of market liquidity due to the presence of pre-liberalization natural monopolies;
- (iv) lack of transparency;

In its report the Commission highlighted the market concentrations as a major hindrance for a successful liberalization process since monopolies of the pre-liberalization era still existed on the market¹¹⁹.

As observed by the Commission, the full ownership unbundling has been perceived as the most effective tool to ensure choice for energy users and enhance the investments¹²⁰ and moreover to ensure that network owners and/or operators have no incentives that are distorted by supply interest of affiliates¹²¹.

The Commission envisaged strengthening of the framework by enhancing powers for the independent NRAs, coordination among them, cooperation among TSOs and last but not least consistent regulation of the cross-border issues.

5. Third Energy Package

The Third Energy Package was introduced by the European Commission in order to further liberalize the natural gas sector on European level. It was supposed to tackle the issues outlined by the Sector Inquiry Report. Relevant to the gas sector from the

¹¹⁸ Commission of the European Communities, Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (n 88), 11, Rec. 52.

¹¹⁹ Commission of the European Communities, DG Competition Report on Energy Sector Inquiry, Commission Staff Working Document accompanying the Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (Final Report) (Brussels, 10 January 2007), SEC(2006) 1724, 12.

¹²⁰ *ibid*, 14.

¹²¹ Commission of the European Communities, Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (n 88), 12, Rec. 53.

third legislative package are Directive 2009/73/EC¹²² ('Third Gas Directive'; '2009 Gas Directive'), Regulation (EC) No 715/2009¹²³ and Regulation (EC) No 713/2009¹²⁴. Being the latest package, it is considered to be the most ambitious in terms of goals formulation, gas market design and cross-border cooperation¹²⁵. Legislative reform can be observed in particular with regard to unbundling regime, market interconnection, cooperation and protection to end-consumers¹²⁶ and last but not least more rigid rules in order to introduce the independence of the regulatory authority not only from the gas sector incumbents but from the government representatives too¹²⁷.

The Third Energy Package sets out regulatory framework which established key principles such as (i) level-playing field between market incumbents guaranteed by potentially effective unbundling (ii) effective regulatory control by the national regulatory authorities and (iii) harmonization of technical rules embodied in network codes for gas¹²⁸. While the first and second ones are prescribed by the Third Gas Directive, the third one is prescribed by the set of legislation¹²⁹ which shall not be subject to the master thesis.

5.1 Market Opening

With regard to the market opening, the Third Gas Directive follows the line introduced by its predecessor and Art. 37 of the 2009 Gas Directive has identical wording with Art. 23 of the 2003 Gas Directive in terms of eligible customers and from 1 July 2007 all customers are 'eligible' ones referring to the term already discussed above. Thus said, the Third Gas Directive followed the approach that every customer is free to choose its supplier and the gas market shall be fully free.

¹²² Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ L 211, 14.8.2009, 94-136.

¹²³ Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005, OJ L 211, 14.8.2009, 36-54.

¹²⁴ Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L 211, 14.8.2009, 1-14.

¹²⁵ Waloszyk, Possibilities and Limitations for EU Gas Market Integration under the Third Energy Package (n 24), 176.

¹²⁶ *ibid.*

¹²⁷ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 185.

¹²⁸ *ibid.*, 235.

¹²⁹ For Network codes for gas see further: European Network of Transmission System Operators for Gas (ENTSO-G), Network Codes and Guidelines < <https://www.entsog.eu/network-codes-and-guidelines> > accessed 27 November 2021.

5.2 Third Party Access

In general, the 2009 Gas Directive maintained the approach undertaken by its predecessor. Analyzing Art. 32 of the Third Gas Directive, the Commission approached for *ex ante* control by rTPA (as a minimum standard) by means of (i) published tariffs and prior published methodologies which are to be (ii) on prior approval by the designated regulatory authority. Similarly, the TPA to LNG and storage facilities and upstream network were still governed by the legislation. Furthermore, regarding for storage and ancillary services, Member States may opt between negotiated and regulated TPA (Art. 33, Para. 1, read in conjunction with Para. 3 and 4). As a rationale behind that different approach for network access and storage facilities access is because the storage facilities are not usually seen as ‘granting’ natural monopoly¹³⁰ but as a tool to manage fluctuations¹³¹. Again, nTPA requires negotiation in good faith, based at first, on objectivity, transparency and non-discrimination (Art. 33, Para. 1 of the Third Gas Directive) and second, on prior published annually commercial conditions for use.

5.3 Unbundling

The Third Energy Package sets the ambitious goal to fragmentate the vertical integrated entities through the advanced unbundling regime¹³² in order to ensure fair and non-discriminatory network operation¹³³. The effective unbundling of the network segments from those of production/import and supply shall secure non-discrimination in the operation of the network grids but also enhance investments in networks (Rec. 6 of the 2009 Gas Directive) and thus prevent the strategic underinvestment¹³⁴.

The Third Energy Package introduced three alternative unbundling models, namely ownership unbundling, independent system operator (ISO) and independent transmission operator (ITO). All of these types reflect different degree of separation between the network operation and the segments of import/production and supply

¹³⁰ Christopher Jones, *EU Energy Law Volume I The Internal Energy Market* 4th Edition (n 84), 59, 3.84.

¹³¹ *Ibid.*

¹³² Schröder, *EU Gas Supply Security, A Political Vision of the Southern Gas Corridor* (n 8), 40.

¹³³ Jones, *EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union* (n 10), 185.

¹³⁴ For the ‘strategic underinvestment’ see further Gianluca Faella, Pietro Merlino, *Strategic Underinvestment as an Abuse of Dominance under EU Competition Rules*, (2013), *World Competition*, Volume 36, Issue 4, 513-539 <<https://kluwerlawonline.com/journalarticle/World+Competition/36.4/WOCO2013040>> accessed 7 October 2021.

in terms of integration of the entity. Furthermore, as observed by the Commission, the unbundling instrument shall incentivize investments but still ensure fair and non-discriminatory access to the transmission and distribution networks. However, it shall be noted, that from the wording of the respective provisions of the Directive, ownership unbundling is the default model, but if the transmission networks are owned by a vertically integrated undertaking on 3 September 2009, Member States shall have a chance to choose between all options (Rec. 14, Art. 9, Para. 8 of the Directive). Thus said, the two alternative models, ISO and ITO, are applicable only to existing vertically integrated companies¹³⁵. Hence, the separation of the assets is not required¹³⁶ and as noted in the Rec. 13 of the Directive, under those models, VIUs are enabled to retain the ownership of the network assets, but regulatory framework and regulatory oversight ensure their functions' compliance, while new transmission systems shall comply with ownership unbundling regime¹³⁷. Since national gas markets are usually occupied by state-owned integrated companies, the unbundling rules are equally applied to private and public entities¹³⁸.

(A) Ownership unbundling

The ownership unbundling model is introduced to ensure the effective separation of production/import and supply segments from those of transmission and distribution¹³⁹ and is envisaged as a default tool to remove the potential discrimination of the VIUs against their competitors with regard to network access and incentives to invest (Rec. 8 of the Third Gas Directive).

Under that model (i) the owner of the transmission is required to act as a transmission system operator (Art. 9, Para. 1, p. (a) of the 2009 Gas Directive); (ii) the same person(s) cannot exercise control¹⁴⁰ over the segments of production or supply and over the TSO

¹³⁵ Jones, *EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union* (n 10), 186; European Commission, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, *The Unbundling Regime* (Brussels, 22 January 2010), 10, 14; Tilman Michael Dralle, *Ownership Unbundling and Related Measures in the EU Energy Sector Foundations, the Impact of WTO Law and Investment Protection*, *European Yearbook of International Economic Law, EYIEL Monographs - Studies in European and International Economic Law Volume 5* (2018, Springer International Publishing AG) ISBN 978-3-319-77796-2 ISBN 978-3-319-77797-9 (eBook) < <https://doi.org/10.1007/978-3-319-77797-9> > 35.

¹³⁶ Jones, *EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union* (n 10), 187.

¹³⁷ European Commission, Interpretative Note, *The Unbundling Regime* (n 135), 5.

¹³⁸ *ibid.*, 10.

¹³⁹ Quadri, 'EU Energy Market Integration through Energy Union: A New Holistic Approach' (n 91), 4.

¹⁴⁰ The term 'control' is used in the sense of 'rights, contracts or any other means which, either separately or in combination and having regard to the considerations of fact or law involved, confer the possibility of exercising decisive influence on an undertaking, in particular by:

and vice versa (Art. 9, Para. 1, p. (b), first and second indent of the Directive); (iii) the same person(s) cannot appoint board members representing the TSO and at the same time exercise control over the segments of production or supply (Art. 9, Para. 1, lit (c); (iv) the same person cannot be board member of the TSO and of the production or supply subsidiary (Art. 9, Para. 1, p. (d)) and thus conflict of interest for those persons shall be prevented¹⁴¹. The person(s) in question shall be construed as any private individual or any legal person (public or private)¹⁴².

Being not only owner but TSO, the particular operator shall bear the responsibility to grant and manage TPA, collect the access, congestion charges and the payments. Furthermore, it shall maintain the network and bear the responsibility about the investments¹⁴³. That model is applicable also to VIUs already owning transmission network but willing to comply with ownership unbundling (Art. 9, Para. 11).

(B) Independent System Operator (ISO)

Under the ISO unbundling model, where on 3 September 2009, the transmission system belongs to a VIU, Member States can decide not to opt for the radical ownership¹⁴⁴ unbundling but to retain the ownership over the network assets and an entirely separate from the VIU entity and that separate entity shall act as a transmission system operator (Art. 14, Para 4). While the transmission assets stay within the integrated entity, in terms of technical and commercial operations the ISO shall bear the responsibility. As already previously observed, it is responsible for granting and managing the TPA, i.e. collection of access and congestion charges and investment and maintenance of the network system¹⁴⁵. Under that model the designated regulatory authority has important role and has further duties, provided for in Art. 41, Para. 4 of the Directive, such as issuance of binding decisions, carrying out investigations, requiring information and imposing penalties for noncompliance.

(a) ownership or the right to use all or part of the assets of an undertaking;

(b) rights or contracts which confer decisive influence on the composition, voting or decisions of the organs of an undertaking' (Rec. 10 of the Third Gas Directive, read in conjunction with Art.3, Para. 2, p. (a) and (b) of the Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), OJ L, 29.1.2004, 1-22.

¹⁴¹ European Commission, Commission Staff Working Paper, Interpretative Note on Directive 2009 European Commission, Interpretative Note, The Unbundling Regime (n 135), 10.

¹⁴² *ibid*, 9.

¹⁴³ *ibid*, 8.

¹⁴⁴ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 75.

¹⁴⁵ European Commission, Interpretative Note, The Unbundling Regime (n 135), 12.

(C) Independent Transmission Operator (ITO)

The last model among the available ones is the independent transmission operator only where on 3 September 2009, the transmission system belongs to a VIU. Under that model, the TSO stays within the integrated undertaking, but further regulatory rules are prescribed. In short, the ITO has to be autonomous and Art. 17, Para. 1 of the Directive provides that it shall be equipped with all financial, technical, physical and human resource and assets in order to fulfil its obligations and carry out the respective activities¹⁴⁶. The tasks and activities are prescribed in Art. 17, Para. 2, read in conjunction with Art. 13 of the Directive. Regarding the assets, the ITO shall own the network assets and all other assets necessary to carry out the activity of transmission (Art. 17, Para. 1, p. (a) of the Directive). In addition, in accordance with Art. 17, Para. 1, p. (b) of the Third Gas Directive, it must be equipped with sufficient number of qualified staff members to deal with the day-to-day activities. Another major characteristic of that model is the independence of the ITO which is embodied in Art. 18 of the 2009 Gas Directive in terms of effective decision-making rights independent from the VIU concerning the assets necessary for its core functions as TSO (Art. 18, Para. 1, p. (a) and Para. 4) and power to raise money on the capital market (Art. 18, Para 1, p. (b)). On top of that, subsidiaries of the VIU in the segments of production or supply shall not have any direct or indirect shareholding in the TSO and vice versa (Art. 18, Para 3) and the commercial and financial relations between the VIU and TSO shall be based solely on market conditions (Art. 18, Para. 6). Nevertheless, Art. 21 of the Directive obliges the TSO to implement and establish a compliance programme setting out the measures which ensure non-discriminatory conduct. In terms of management, Art. 20 of the Directive addresses TSOs and according to it, every ITO shall have a supervisory board composed of members who represent not only the VIU, but third-party shareholders and other interested parties.

(D) Unbundling regime under Art. 9, Para. 9 of the Third Gas Directive (ITO+)

Beside all the three unbundling regimes discussed above, there is an additional and untraditional regime. Art. 9, Para. 9 of the Directive enables Member States to opt for a specific regime, called also ITO+ model, 'unbundling a la carte'¹⁴⁷ or 'Scottish

¹⁴⁶ *ibid*, 15.

¹⁴⁷ Diathessopoulos, *Competition Law and Sector Regulation in the European Energy Market after the Third Energy Package: Hierarchy and Efficiency* (n 74), 46.

clause'¹⁴⁸, where the transmission networks on 3 September 2009 belong to a VIU and specific arrangements in national legislation are already in place which secure 'more effective independence' of the TSO than the ITO model.

Under that model (i) the national regulatory framework guarantees more effectively independence of the TSO compared to the ITO model; (ii) that regulatory framework shall be in place before 3 September 2009 and (iii) the transmission system belongs to a VIU on 3 September 2009. Moreover, by the virtue of Art. 9, Para. 10 of the Directive, the Commission is empowered to verify that the particular regulatory framework in question guarantees more effective independence and issues a decision binding upon the NRAs in certification procedures¹⁴⁹. That model is rarely used in practice within the EU.

5.4 National Regulatory Authority

NRAs are seen as a significant factor with regard to the sector regulation convergence within the Union since they are the main implementing body of the EU gas legal framework and their independence from both governmental and industrial influence is crucial taking into account the roles and powers they have under the Third Energy Package¹⁵⁰.

In general, authors usually outline several important functions of the independent energy regulators, i.a. (i) preventing discrimination against competitors for access to grid network, because it is what the higher degree of unbundling results in lesser degree of such discrimination, and namely here the NRA plays its role by examining the terms and conditions adopted by the transmission system operators (TSOs) for access to its network; (ii) preventing cross-subsidies where VIUs exist on the market, because where the VIUs sets as high as possible prices for transmission it could reduce its margins on production and/or supply while maintain the overall profit; (iii) prevent excessive prices¹⁵¹.

¹⁴⁸ Dirk Buschle, *Unbundling of State-owned Transmission System Operators – Effective Remedy or Eyewash?*, *European Networks Law & Regulation Quarterly*, Volume 1, Issue 1 (2013), 49 – 64 <<https://www.proquest.com/openview/6b355c7b24621fd03ac5d4b34d67cb41/1?pq-origsite=gscholar&cbl=2035947>> accessed 8 October 2021, 49.

¹⁴⁹ Council of European Energy Regulators (CEER), *CEER Status Review Status Review on the Implementation of Transmission System Operators' Unbundling Provisions of the 3rd Energy Package*, Ref: C15-LTF-43-04 (1 April 2016, Update on 28 April 2016), 33.

¹⁵⁰ Waloszyk, *Possibilities and Limitations for EU Gas Market Integration under the Third Energy Package* (n 24), 179.

¹⁵¹ Christopher Jones, *EU Energy Law Volume I The Internal Energy Market 4th Edition* (n 84), 12, 1.27.

Compared to the previous Directives, the Third Gas Directive applied stricter approach with regard to the national regulatory authorities and significant changes are evident since as observed by the Commission the powers of the regulatory authorities needed strengthening¹⁵². Art. 39, Para. 1 prescribes that Member States shall designate sole regulatory authority at national level. Furthermore, that package tackles the issue of regulators' independence and thus prescribes that the regulatory authority shall be independent from the government too as it can be deduced from the wording of Art. 39, Para. 4 of the Directive and shall be created as a separate legal entity independent from the ministry or any other government body¹⁵³. Nevertheless, the independence of the regulator is seen as a 'key principle of good governance and a fundamental condition for market confidence'¹⁵⁴ and the NRA shall carry out its duties impartially¹⁵⁵.

NRAs shall be able to take their decisions autonomously and independently in two perspectives namely *ex ante* and *ex post*. The *ex ante* perspective embodies the view that interference from the government or any other public or private entity shall be prevented prior to the taking of the decisions¹⁵⁶. The *ex post* perspective reflects that the NRA is able to take binding decisions without any formal or other approval or consent of third parties or suspension by any governmental agent¹⁵⁷ and impose effective, proportionate and dissuasive penalties¹⁵⁸.

5.5 Other advancements of the Third Energy Package

(A) Agency for the Cooperation of Energy Regulators (ACER)

The liberalization policy of national markets and creating an internal gas market rely on the regulatory framework part of which is discussed in the current chapter. Namely the national regulatory authorities which are entrusted to ensure compliance and

¹⁵² Commission of the European Communities, Proposal for a Directive of the European Parliament and of the Council amending Directive 2009/73/EC concerning common rules for the internal market in natural gas (Brussels, 19.9.2007) COM (2007) 529 final, 8.

¹⁵³ European Commission, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, The Regulatory Authorities (Brussels, 22 January 2010), 6.

¹⁵⁴ Commission of the European Communities, Proposal for a Directive of the European Parliament and of the Council amending Directive 2009/73/EC concerning common rules for the internal market in natural gas (n 154), 9.

¹⁵⁵ European Commission, Interpretative Note, The Regulatory Authorities (n 153), 5.

¹⁵⁶ *ibid*, 9.

¹⁵⁷ *ibid*, 9.

¹⁵⁸ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 18.

regulation over these national markets and thus cooperation and coordination among NRAs are necessary in order to develop and ensure efficiency of an integrated internal market for gas¹⁵⁹. Thus, the Third Energy Package aims at taking the role of the energy regulators at EU level.

ACER was established in 2009 with Regulation (EC) No 713/2009¹⁶⁰. However, in order to tackle the fragmented regulatory oversight by national regulators and to ensure Union level decision-making process where one is needed, the Commission has initiated amendments and ACER Recast Regulation entered into force in 2019, namely Regulation (EU) 2019/942¹⁶¹. Art. 16 of that Regulation prescribes that ACER has its own legal personality and is a Union body.

Among the main objectives of ACER, three important ones could be pointed out, namely¹⁶²: (i) assistance to the NRAs and where necessary coordinate their actions; (ii) in situations where more than one Member State is concerned and cross-border trade or cross-border system security is concerned, ACER shall act as mediator or shall settle the disagreements; (iii) contribution to common and uniform regulatory and supervisory practices.

The current thesis has no purpose of discussing the tasks of ACER, so the latter will not be touched upon. However, since the certification procedure of the TSO will be touched upon in the thesis below, it shall be noted that Regulation 713/2009 provided that upon a request by the Commission ACER shall provide an opinion (Art. 9), while the ACER Recast Regulations remains silent on that topic.

(B) Certification Procedure

With regard to the certification procedure of the TSOs, Art. 10 of the 2009 Gas Directive and Art. 3 of Regulation 715/2009 are the main regulatory provisions that set out the procedure and concern every TSO in its initial certification and the reassessment of its compliance with the unbundling rules¹⁶³.

¹⁵⁹ Christopher Jones, *EU Energy Law Volume I The Internal Energy Market* (Clays & Casteels Publishing, 2021, 5th Edition) ISBN 9789077644669 (ePDF), 321, 7.1.

¹⁶⁰ Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators, OJ L 211, 14.8.2009, 1-14.

¹⁶¹ Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators, OJ L 158, 14.6.2019, 22-53.

¹⁶² Jones, *EU Energy Law Volume I The Internal Energy Market* 5th Edition (n 159), 326-327, 7.15.

¹⁶³ European Commission, *Commission Staff Working Paper on certification of Transmission System Operators of networks for electricity and natural gas in the European Union*, SEC(2011) 1095 final (Brussels, 21.9.2021), 2.

Furthermore, before being designated as a transmission system operator, a company owning assets in network grids shall be subject to certification procedure which procedure was introduced by the Third Energy Package. The aim of that procedure is to ensure compliance with the unbundling regime desired by that company¹⁶⁴ and it shall be viewed as *ex ante* intervention¹⁶⁵ from the regulator's side.

It shall be pointed out that a failure to obtain a certificate cannot constitute a situation where there is no TSO, but in the specific case of the ITO regime, the TSO shall be the transmission system owner, which is part of the vertically integrated company but it should have infringed the EU law while operating the system¹⁶⁶.

While the designation of a TSO lies within the competence of the Member States (Art. 10, Para. 2 of the Third Gas Directive), the certification lies within the duties of the regulatory authorities (Art. 10, Para. 5 and 6 of the Third Gas Directive, read in conjunction with Art. 3 of Regulation (EC) No 715/2009¹⁶⁷.

The certification procedure starts either by notification from a TSO or by request by the Commission (Art. 10, Para. 5 of the 2009 Gas Directive) to the national regulatory authority. The authority shall adopt a decision within a period of four months and that decision has to be notified to the Commission (Art. 10, Para. 6 of the 2009 Gas Directive). Moreover, within two months the Commission shall deliver an opinion to the relevant national regulatory authority and within two months of receiving the opinion of the Commission, the national regulatory authority shall adopt its final decision (Art. 3 of Regulation (EC) No 715/2009). Moreover, the designation of a TSO shall be notified to the Commission and published in the Official Journal of the European Union.

(C) Third Country Regime ('Lex Gazprom'¹⁶⁸)

Another important aspect with regard to the certification procedure discussed above is the so-called 'Gazprom Clause', prescribed by Art. 11 of the Third Gas Directive.

¹⁶⁴ *ibid*, 2; Christopher Jones, EU Energy Law Volume I The Internal Energy Market 4th Edition (n 84), 121, 4.93;

¹⁶⁵ Christopher Jones, EU Energy Law Volume I The Internal Energy Market 4th Edition (n 84), 122, 4.86.

¹⁶⁶ *ibid*, 122, 4.94.

¹⁶⁷ Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005, OJ L 211, 14.8.2009, 36-54.

¹⁶⁸ Kim Talus, EU Energy Law and Policy: A Critical Account (Oxford University Press, 2013) ISBN 9780199686391, 83.

Allowing non-EU person to operate as a TSO or to control transmission assets could put in jeopardy the security of supply policy¹⁶⁹. Rec. 22 of the Directive highlights security of supply as essential for the efficient functioning of the internal gas market and since assets serving for transmission are considered essential for public security and

‘[p]ersons from third countries should therefore only be allowed to control a transmission system or a transmission system operator if they comply with the requirements of effective separation that apply inside the Community’.

Art. 11 of the 2009 Gas Directive sets forth the same requirements with regard to the certification procedure that shall apply to third country persons desiring to acquire control over transmission systems or their owners and thus these persons shall abide not only by the ownership unbundling regime (Art. 9 of the Directive) but also the certification would not put at risk the security of supply. Thus said, the certification procedure is the same, but the national regulatory authority shall take of utmost importance Commission’s opinion and hence, shall refuse certification where it would put at risk the Member State’s security of supply of other Member State(s)¹⁷⁰.

The provision in question aims at ensuring that vertically integrated undertakings from third countries comply with the EU liberalization policy and the EU interests are secured since EU networks would be controlled by foreign undertakings in a way compatible with EU law¹⁷¹. To sum up, the Commission recognizes that third-country persons shall unambiguously prove compliance with the same requirements as EU persons and thus certification procedure shall ensure that compliance¹⁷².

(D) Exemption Regime

The exemptions are considered as a crucial tool in transformation of national and monopolistic markets into competitive EU internal gas market¹⁷³. The exemption regime represents the interrelation between on one hand investment in transmission network and on other hand TPA to the infrastructure in order to enhance competition

¹⁶⁹ Thomas Cottier, Sofya Matteotti-Berkutova, Olga Nartova, Third Country Relations in EU Unbundling of Natural Gas Markets: The “Gazprom Clause” of Directive 2009/73 EC and WTO Law, World Trade Institute, NCCR Trade Regulation Working Paper No. 2010/06 (5 May 2010) < https://www.wti.org/media/filer_public/96/9b/969b5456-820f-4077-a716-67576d322ca9/access_to_gasgrids.pdf > accessed 23 October 2021.

¹⁷⁰ *ibid.*

¹⁷¹ Talus, EU Energy Law and Policy: A Critical Account (n 168), 83.

¹⁷² European Commission, Press corner, Energising Europe: A real market with secure supply MEMO/07/372 (Brussels, 19 September 2007) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_07_361 > accessed 25 October 2021.

¹⁷³ Talus, EU Energy Law and Policy: A Critical Account (n 168), 88.

on the market. The rationale behind it is to bear the fruits of long-term efficiency gains over short-term advantage¹⁷⁴.

Similar to its predecessor, the Third Energy Package and particularly Art. 36 of the Third Gas Directive provides for temporary exemption of new gas infrastructure from key instruments such as TPA to networks, storage facilities and LNG terminals, on tariff regulation and ownership unbundling regime¹⁷⁵. That results, depending on the extent of the exemption granted, in *de facto* management of the infrastructure asset in a way its owner and /or operator wishes¹⁷⁶. That exemption procedure can be applied only to new gas infrastructure and under infrastructure shall be construed interconnectors, LNG or storage facilities¹⁷⁷.

Furthermore, the provisions of Art. 36, Para. 1, p. (a)-(e) can be construed as a list of criteria to be fulfilled in order to have an exemption granted, namely:

(i) the investment must enhance competition in the supply segment and also enhance security of supply; The wording suggests that an infrastructure would not be exempted if it would impede competition on the market¹⁷⁸.

(ii) the level of risk attached to the investment must be such that the investment would not take place unless an exemption was granted; Factors that shall be taken into account are the overall cost of the project, the potential revenue and amortization period¹⁷⁹ that is not necessary to correspond to the duration of the exemption period¹⁸⁰.

(iii) the new infrastructure must be owned by an entity legally separate from the system operators in whose systems the infrastructure will be built; That

¹⁷⁴ *ibid*, 97.

¹⁷⁵ Taking into account the aforesaid, new infrastructure shall abide by the ownership unbundling option as default and sole option and thus, the exemption regime comprises only ownership unbundling embodied in Art. 9.

¹⁷⁶ Christopher Jones, *EU Energy Law Volume I The Internal Energy Market 4th Edition* (n 84), 563, 11.118.

¹⁷⁷ Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria from the requirements regarding third party access, tariff regulation and ownership unbundling, C(2018) 5058 final (Brussels, 25.7.2018) < https://ec.europa.eu/energy/sites/ener/files/documents/2018_igb_decision_en.pdf > accessed 9 October 2021, Rec. 35.

¹⁷⁸ Kim Talus, *Vertical Natural Gas Transportation Capacity, Upstream Commodity Contracts and EU Competition Law* (Kluwer Law International BV, The Netherlands, 2011) web-ISBN 978-90-411-5123-0, 104.

¹⁷⁹ *ibid*, 108.

¹⁸⁰ Commission of the European Communities, *New Infrastructure Exemptions* (n 110), Rec. 52.1(b).

requirement would be met even if the TSO acts in joint venture to build the infrastructure¹⁸¹.

(iv) charges must be levied on users of that infrastructure;

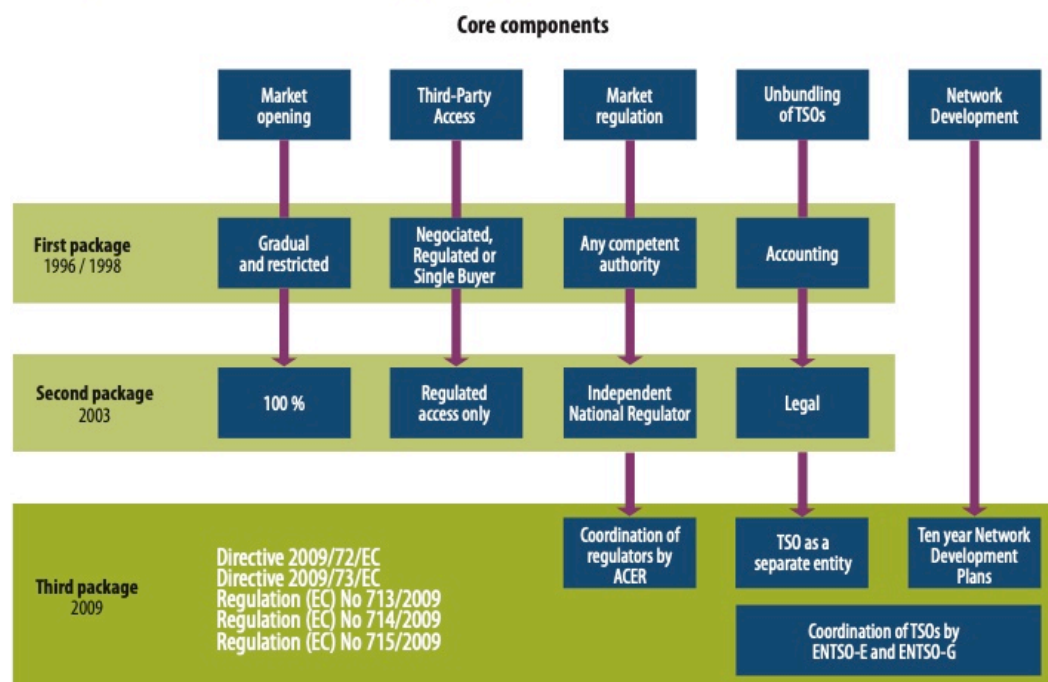
(v) the exemption must not be to the detriment of competition, the effective functioning of the internal market in natural gas, or the efficient functioning of the regulated system to which the infrastructure is connected.

It shall be noted that the exemption is granted on a case-by-case basis and even if the conditions are fulfilled the exemption is not automatically granted¹⁸².

6. Final Remarks

Figure 3: Development of the energy packages

Development of the three energy packages



Source: European Court of Auditors, Improving the security of energy supply by developing the internal energy market: more efforts needed, Special Report No 16 (2015), 12

The figure above illustrates how the last among the current three packages prescribes for stricter rules for unbundling in order to tackle the conflict of interest raised by the

¹⁸¹ Talus, Vertical Natural Gas Transportation Capacity, Upstream Commodity Contracts and EU Competition Law (n 178), 108.

¹⁸² *ibid*, 110.

vertical integration and introduce ACER in order to enhance the cross-border trade of natural gas.

As it is evident, each from the liberalization instruments discussed above underwent serious improvement in order to achieve open and competitive gas market. Each of them alone cannot contribute to the liberalization goal, but the right balance of interaction between them is necessary at national level in all the Member States in order to ensure the existence of the internal market for natural gas.

For instance, regarding the market opening, the Commission forced the transmission to completely free choice of supplier and thus allowing every customer to purchase gas even from another Member State.

Furthermore, the TPA also underwent serious improvement by starting with *ex post* control in the First Gas Directive with the potential option for the Member States based on the obligation for published commercial terms and conditions and going through *ex ante* control with the only possible option, namely the rTPA with published tariffs and common network code prescribed by the Second Energy Package¹⁸³.

The effort of the European Commission in building internal market for gas has been concentrated in the consecutive energy packages discussed above¹⁸⁴. The gas market has been opened gradually, the regulatory oversight has been tightened and third-party access and unbundling regimes aimed to dismantle the vertically integrated undertakings¹⁸⁵ and thus prevent them from retaining their position as national champions. Nevertheless, the gradual approach to liberalization reflects the idea that successfully liberalized national gas markets would result in new market entrants and thus energy security and lower prices for consumers are ensured¹⁸⁶.

The Second and Third Gas Directive obliged the Member States to designate transmission system operator, distribution system operators, storage system operators and LNG system operators¹⁸⁷.

¹⁸³ Haase, European Gas Market Liberalisation: Competition versus security of supply (n 27), 54.

¹⁸⁴ Waloszyk, Possibilities and Limitations for EU Gas Market Integration under the Third Energy Package (n 24), 179.

¹⁸⁵ Iana Dreyer, Fredrik Erixon, and Robin Winkler, Research Report The quest for gas market competition fighting Europe's dependency on Russian gas more effectively, (2010) ECIPE Occasional Paper, No. 1/2010, European Centre for International Political Economy (ECIPE) <<https://www.econstor.eu/bitstream/10419/174707/1/ecipe-op-2010-1.pdf>> accessed 31 July 2021, 5.

¹⁸⁶ Yu, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (n 38).

¹⁸⁷ Ming-Zhi Gao, Regulating Gas Liberalisation A Comparative Study on Unbundling and Open Access Regime in the US, Europe, Japan, South Korea and Taiwan (n 79), 175.

Thus said, the liberalization policy aimed to tackle the typical state regulation in the gas industry in order to remove or mitigate entry barriers into the segments of supply chain¹⁸⁸ by means of market opening and non-discriminatory third-party access to network grids, necessary for the transportation of natural gas.

¹⁸⁸ Volkan Özdemir, H. Buğra Yavuz, Emine Tokgöz, The Trans-Anatolian Pipeline (TANAP) as a unique project in the Eurasian gas network: A comparative analysis, *Utilities Policy*, Volume 37 (2015), 97-103, ISSN 0957-1787 < <https://doi.org/10.1016/j.jup.2015.06.007>; <https://www.sciencedirect.com/science/article/pii/S0957178715000417> > accessed 14 October 2021, 97.

Page intentionally left blank

Chapter III:

BULGARIAN GAS SECTOR SPECIFICS

1. Introductory Remarks

Interconnected European gas networks are a *conditio sine qua non* for (i) Europe's energy security, (ii) enhancing competition on the market resulting in lower prices and (iii) achieving the climate policy¹⁸⁹. Bulgaria as an EU Member State shall put effort to increase its interconnectivity with its neighbouring Member States by means of investment in transmission interconnectors.

While the nature of the liberalization process is to address the existing markets by introducing non-discrimination and transparency as main principles¹⁹⁰, the energy packages do not prescribe role model for emerging national gas markets. Thus said, Bulgaria has had a gas market prior to its accession to EU but until lately the supply has been dependent on the import of natural gas from only one supplier – Russia through one route and lacked sufficient bi-directional interconnection with its neighboring states.

Several common development trends can be observed across the different national gas markets, namely (i) privatization of the ownership of the companies involved in the gas sector; (ii) unbundling or less vertical integration and (iii) lesser degree of governmental intervention¹⁹¹. Having analysed in the previous chapter the key liberalization instruments the Commission adopted, the current chapter will show whether Bulgaria has 'followed the common trend'.

Although the concept of liberalization is precepted as increasing competition and at the same time decreasing the influence of state in the industry¹⁹² and taking into account the specifics of a given national market, balance shall be stricken between the state intervention in the gas industry and the compliance with the liberalization policy abiding by the principles the Commission has provided for. As already discussed, the government is responsible for building the regulatory framework, while the NRA shall monitor the compliance by the market players.

¹⁸⁹ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 23.

¹⁹⁰ Yu, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (n 38).

¹⁹¹ Ming-Zhi Gao, Regulating Gas Liberalisation A Comparative Study on Unbundling and Open Access Regime in the US, Europe, Japan, South Korea and Taiwan (n 79), 2-3.

¹⁹² Haase, European Gas Market Liberalisation: Competition versus security of supply (n 27), 49.

The road from regulated monopoly to unregulated competition is usually hard and thus the journey on that road is challenging and brings uncertainty¹⁹³.

In order to understand the reasons why the market is *de lege* liberalized but *de facto* closed to some extent, a picture of the Bulgarian gas market shall be illustrated.

The current chapter shall reflect the status quo of the national natural gas market where the analysis is based on the current legislation. Nevertheless, it is important to mention how the accession of Bulgaria to the European Union impacted the national legislation and how the legislation prepared the gas sector for that accession.

The main piece of legislation regarding the policy of natural gas sector at national level is the Energy Act¹⁹⁴ (publ. State Gazette No 107/9.12.2003), which was amended in 2006 published in State Gazette No 74/08.09.2006 in order to prepare Bulgarian natural gas sector for the upcoming in 1 January 2007 accession of Bulgaria to the EU.

The Energy Act (EA) introduced the eligible customer having the right to freely choose its suppliers even outside the country (Art. 180 of the EA). Moreover, it prescribed third party access (Art. 172 of the EA) and followed the rTPA where the regulatory authority (State Energy and Water Regulatory Commission at that time) regulates the prices for both transmission and storage (Art. 30, Para. 1, p. 7 and 8). With respect to unbundling, the Energy Act envisaged not only separate accounting (Art. 37 and 38 of the EA) but also legal and function unbundling in events of vertical integration for both transmission (Art. 186a of the EA) and distribution segments (Art. 190a of the EA). Moreover, the existence of regulatory authority is envisaged by the Energy Act since 2005 in the face of the State Energy and Water Regulatory Commission (Art. 10 ff of the EA) but still amendments were made in 2006 in order to ensure the compliance with the EU legislation.

Moreover, with respect to the state-owned vertically integrated incumbent, § 22, Para. 1 of the Supplementary Provision of the EA prescribed the separation of Bulgargaz'

¹⁹³ Mark Armstrong and David E. M. Sappington, Regulation, Competition and Liberalization, Journal of Economic Literature, Vol. 44, Issue No. 2 (Jun., 2006), 325 – 366 < <https://www.jstor.org/stable/30032251> > accessed 3 October 2021, 360

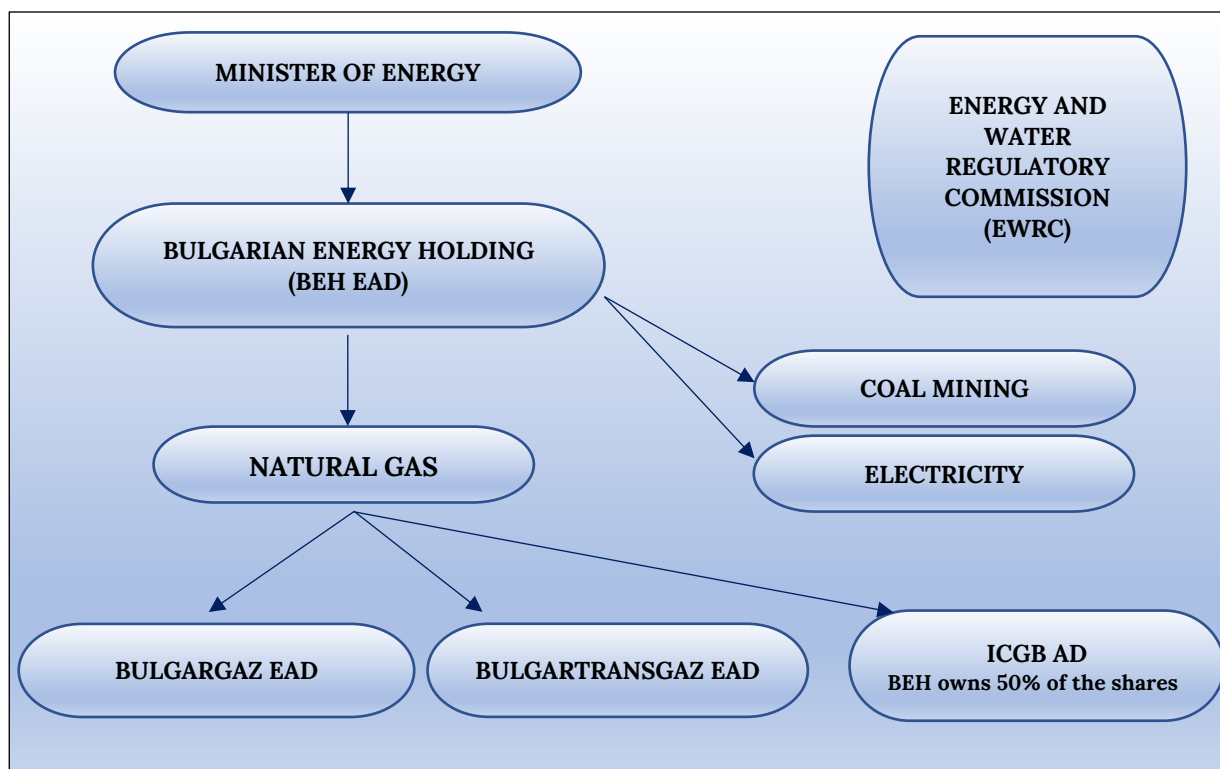
¹⁹⁴ Закон за енергетиката (обн. ДВ, бр. 107/9.12.2003, изм. и доп., ДВ, бр. 74/08.09.2006, изм. и доп., ДВ, бр. 54/17.07.2012, изм. и доп., ДВ, бр. 17/06.03.2015, изм. и доп., ДВ, бр. 83/9.10.2018, изм. и доп., ДВ, бр. 41/21.05.2019); изм. и доп. повече от 50 пъти /Energy Act (publ. State Gazette No 107/9.12.2003, amended and supplemented, State Gazette 74/08.09.2006, amended and supplemented, State Gazette 54/17.07.2012, amended and supplemented, State Gazette 17/06.03.2015, amended and supplemented, State Gazette 83/09.10.2018, amended and supplemented, State Gazette 41/21.05.2019) amended and supplemented more than 50 times < <https://lex.bg/laws/ldoc/2135475623> > accessed 14 January 2022.

activities associated with natural gas transmission in legal and functional terms from the activities associated with public supply of natural gas by 31 December 2006, but not later than the date of entry into force of the Treaty concerning the Accession of the Republic of Bulgaria to the European Union.

Namely Bulgargaz is the predecessor of the Bulgarian Energy Holding (BEH) where the latter was established in 2008. BEH is the successor of the state-owned company Нефт и Газ (Oil and Gas) established in 1973 and was renamed to Bulgargaz in 1990. In October 2006 Bulgargaz was transformed into Bulgargaz Holding through the spin-off of two solely owned joint stock companies - Bulgartransgaz and Bulgargaz, where the latter two are legal successors of the respective parts of the property (rights and obligations) of the former Bulgargaz¹⁹⁵.

2. Institutional Structure of the Bulgarian Market for Natural Gas¹⁹⁶

Figure 4: The structure of the Bulgarian energy market with emphasis on gas



Source: Author's own creation, based on information published by BEH EAD

¹⁹⁵ Bulgarian Energy Holding, About BEH, History < <https://bgenh.com/en/page/40/History.html> > accessed 3 October 2021.

¹⁹⁶ Bulgaria is a parliamentary republic where the Prime Minister is the head of the cabinet. There is separation of powers in three, namely legislative, executive and judicial powers. The legislative belongs to the National Assembly (the Parliament), while the executive belongs to the Council of Ministers (Government, Cabinet).

There are several major institutions and undertakings which play role in the national gas sector and to some extent navigate the direction into which the markets functions and operates.

The state's policy in the energy sector is carried out through the Parliament and the Government as prescribed by Art. 3, Para. 1 of the Energy Act¹⁹⁷. Furthermore, the national policy in the energy sector is implemented through the Minister of Energy (Art. 4, Para. 1).

The Energy Water Regulatory Commission (EWRC) / *Комисия за енергийно и водно регулиране (КЕВР)* is an independent specialized state body, carrying out the regulation of the activities in the energy sector¹⁹⁸ and is the designated regulatory authority.

Furthermore, Bulgarian Energy Holding (BEH) is a key undertaking in the energy sector in Bulgaria. BEH is a holding entity, 100 % solely state-owned joint stock company, which governs the energy sector and consolidates the undertakings dealing with production and transmission of electricity, transmission and storage of natural gas and lignite coal mining. Ownership rights of the state are exercised by the Minister of Energy¹⁹⁹. Nevertheless, the current topic will not discuss the BEH's subsidiaries in the electricity or coal mining sector. Despite the similarities between electricity and gas economies in terms of liberalization, they differ and electricity will be referred to in order to compare between them.

Bulgargaz EAD / *"Булгаргаз" ЕАД* is a joint stock company solely owned by BEH²⁰⁰ and is the sole public supplier and a gas trader while Bulgartransgaz EAD / *"Булгартрансгаз" ЕАД*, also joint stock company solely owned by BEH is a combined operator performing the activities of transmission and storage and certified as

¹⁹⁷ Energy Act (n 194).

¹⁹⁸ Ministry of Energy, Bulletin for the condition and development of the energy sector of the Republic of Bulgaria in 2020 <https://www.me.government.bg/uploads/manager/source/VOP/Buletin_Energy2020.pdf> accessed 3 October 2021, 3.

¹⁹⁹ *ibid*, 4; Bulgarian Energy Holding, About BEH, History (n 195).

²⁰⁰ Bulgargaz, About, Profile < <https://www.bulgargaz.bg/en/about-us/profile-24> > accessed 3 October 2021.

independent transmission operator (ITO)²⁰¹ and owns the only domestic transmission and transit grids and the only storage facility²⁰².

Thus said, both companies are subsidiaries of BEH and the latter is acting as a vertically integrated undertaking (VIU) under the meaning of the energy packages in the energy sector at all, and in particular in the natural gas sector. The situation is similar in the electricity sector, where BEH's subsidiaries are among the main players on the electricity market²⁰³ having one sole public supplier of electricity and one sole transmission system operator, also certified as ITO.

In general, the Bulgarian natural gas market is characterized by existing monopolies operating on the import and supply on one hand and on the transmission and storage on the other.

However, some Member States are incentivized to create 'national champions' in order to create leverage against the producers outside the EU²⁰⁴ which play huge role on the gas market since the production within EU cannot satisfy the demand. Bulgaria makes no difference in that regard, since national production of natural gas is almost absent and competition could occur only on ground of gas imports.

The import is highly dominated by the public supplier – Bulgargaz where the latter purchases the majority of its gas volumes from one supplier – Russian Gazprom. Since Bulgargaz is the main and dominant player on the wholesale market, the Energy Act imposes gas release program on the public supplier for offering the unpurchased gas.

(A) BULGARIAN ENERGY HOLDING (BEH)

BEH is a crucial market player with respect to energy as a whole on national level. As pointed above, BEH plays the role of consolidating parent company and thus consolidates not only the public supply of natural gas by means of Bulgargaz but transmission, transit and storage too by means of Bulgartransgaz.

Henceforth, the establishment of BEH has been cleared by the National Competition Authority – Commission for Protection of Competition (CPC) with Decision No 505

²⁰¹ Bulgartransgaz EAD, About us < <https://www.bulgartransgaz.bg/en/pages/about-us-1.html> > accessed 3 October 2021; Ministry of Energy, Bulletin for the condition and development of the energy sector of the Republic of Bulgaria in 2020 (n 198), 5.

²⁰² Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 71.

²⁰³ See further the figure on Bulgarian Energy Holding, About BEH, History (n 195).

²⁰⁴ Egenhofer, Gialoglou, Rethinking the EU Regulatory Strategy for the Internal Energy Market (n 111), 26.

of 24.06.2008²⁰⁵ where CPC found that the creation of BEH does not constitute ‘concentration of business activity’ but rather intracompany restructuring²⁰⁶. Moreover, it was elaborated that BEH’s activities in the decision-making process will be the exercise of the rights of a sole shareholder in those companies, but the latter will retain their independence in terms of decision-making²⁰⁷.

BEH concentrates assets of more than EUR 10 billion and revenues of approximately EUR 2,8 billion in 2020²⁰⁸.

(B) ENERGY AND WATER REGULATORY COMMISSION (EWRC)

The Energy and Water Regulatory Commission (EWRC) is the national regulatory authority of Bulgaria.

The State Energy Regulatory Commission is established with a Decree of the Council of Ministers of the Republic of Bulgaria No 181 of 10 Sep 1999, based on Art. 11, Para.2 of the Energy and Energy Efficiency Act. With the publishing and promulgation of the Regulation of Water Supply and Sewerage Services Act and the Commission is transformed into State Energy and Water Regulatory Commission. In 2015 the Commission was transformed into Energy and Water Regulatory Commission²⁰⁹.

The Commission bears the responsibility for licensing, price regulation, control and dispute resolution in the sectors of electricity, natural gas, water and heating energy²¹⁰ as it can also be easily guessed by its name.

Since Bulgaria has partially price regulated both electricity and gas markets the EWRC shall secure fair and transparent gas pricing.

²⁰⁵ Решение № 505/24.06.2008 г. на Комисия за защита на конкуренцията / Decision No 505 of 24.06.2008 of the Commission for protection of competition/ < <https://www.cpc.bg/ViewResult.aspx?type=Blob&id=2792> > accessed 12 November 2021.

²⁰⁶ *ibid*, 16.

²⁰⁷ *ibid*.

²⁰⁸ Bulgarian Energy Holding, Investors, Financial reports, 2020, Annual financial reports as at 31.12.2020, Annual financial report – consolidated < <https://bgenh.com/storage/app/public/uploads/files/finans/2020/31.12/FSconsBEH2020ENaud.pdf> > accessed 11 October 2021, 16.

²⁰⁹ Republic of Bulgaria, Energy and water regulatory commission (EWRC), About EWRC < <https://www.dker.bg/en/about-ewrc.html> > accessed 3 October 2021.

²¹⁰ Atanas Georgiev, Bulgaria – the Island of Non-Liberalization, The ICER Chronicle (Ed. 3, March 2015) 30-34 < https://www.researchgate.net/publication/305114729_Bulgaria_-_the_Island_of_Non-Liberalization > accessed 31 October 2021, 32.

(C) BULGARGAZ

Bulgargaz is a 'public supplier of natural gas in Bulgaria responsible for ensuring natural gas supply to end suppliers and to persons holders of a license for heat production and transmission, at prices and conditions approved by the EWRC'²¹¹.

The Energy Act prescribes for the existence of the figure of 'public supplier' on both electricity and gas markets. Those public suppliers are entitled with certain obligations and they provide services of public interest, as prescribed by the Energy Act. The essence of the services of public interest will be discussed beneath in the master thesis (see Chapter VI).

Bulgargaz is the sole public supplier on the Bulgarian gas market and the main gas supplier on the wholesale market²¹². It was issued a license in 2006 for public supply of natural gas for 35 years²¹³. By the virtue of Art. 30, Para. 1, Point 7 of the Energy Act, the public supplier sells natural gas to end customers and to person licensed for production and transmission of heating energy on prices, regulated by EWRC. With the amendments of the Energy Act in 2020, customers connected to the gas transmission network were left outside the scope of the regulated price provision, while before that amendment, the public supplier supplied them on regulated prices.

Bulgargaz shall ensure an uninterrupted gas supply to its customers and its role of public supplier ensures its importance for the sector at national level²¹⁴.

By the virtue of decision № P-046 / 29.11.2006 of EWRC, Bulgargaz was issued a licence № А-214-14/29.11.2006 'for public supply of natural gas in Republic of Bulgaria'²¹⁵, for a period of 35 years where the incumbent has the rights and obligations:

²¹¹ Bulgartransgaz, Business development, TEN-YEAR NETWORK DEVELOPMENT PLANS OF "BULGARTRANS-GAZ" EAD, 2021 - 2030 Ten-Year Network Development Plan of Bulgartransgaz EAD, approved by the Company Management Board by Protocol № 516/11.03.2021, submitted for approval to the Energy and Water Regulatory Commission by Application Incoming No. E-15-45-19 of 13.04.2021 < <https://www.bulgartransgaz.bg/files/useruploads/files/amd/TYNDP%202021%20-%202030%20EN.pdf> > accessed 3 January 2022, 13.

²¹² Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 7.

²¹³ Комисия за енергийно и водно регулиране, Природен газ, Лицензии / Energy and water regulatory commission (EWRC), Natural Gas, Licenses/ *available only in Bulgarian* < <https://www.dker.bg/uploads/2021/spravka-lic-pg-oct2021.pdf> > accessed 30 October 2021.

²¹⁴ Ralitsa Petrova Hiteva, Tomas Maltby, Standing in the way by standing in the middle: The case of state-owned natural gas intermediaries in Bulgaria, *Geoforum*, Volume 54, 2014, Pages 120-131, ISSN 0016-7185, < <https://doi.org/10.1016/j.geoforum.2014.04.006> > accessed 22 July 2021, 126.

²¹⁵ Bulgargaz AD, About, Licenses < <https://www.bulgargaz.bg/en/about-us/licenses-37> > accessed 14 November 2021.

(i) to conclude deals with gas production enterprises and gas traders for purchase of natural gas in volumes, needed for covering the demand of the customers, physically connected to the gas transmission grid, and for the quantities, contracted for carrying out the activity of public suppliers;

(ii) to conclude gas sales deals with customers;

(iii) to conclude deals for gas transmission services with TSO and DSO's;

(iv) to conclude deals for gas storage services with Storage SO's (SSO's);

(v) to fulfill any additional activities related to the public supply of natural gas;

(vi) the licence-holder is obliged to provide customers with an uninterrupted and qualitative supply of natural gas;

(vii) the license-holder is not entitled to decline conclusion of sales gas contract to the customer physically connected to the gas transmission grid or to a public supplier, in accordance with the legislation in force²¹⁶.

However, part of these duties and responsibilities date back to the time when Bulgargaz Holding AD acted and comprised both supply and transmission. Later Bulgargaz Holding was restructured in BEH and as pointed out above the activities concerning transmission were separated from Bulgargaz.

Currently Bulgargaz is under dual licence regime, and it holds a licence for public supply as mentioned above and another one for trade with natural gas issued in 2021 for period of 10 years²¹⁷.

I find the rationale behind that dual licensing regime that the national legislator aims at removing the role of public supplier in the near future but at the same time enabling Bulgargaz to trade with gas on market conditions and enhancing the fulfilment of the gas release program.

(D) BULGARTRANGAZ

Bulgaria has transposed all three main unbundling regimes in the national Energy act, namely the ownership unbundling, ISO and ITO models.

²¹⁶ Bulgargaz, About, Profile < <https://www.bulgargaz.bg/en/about-us/profile-24> > accessed 14 November 2021.

²¹⁷ EWRC, Natural Gas, Licenses (n 213), No 37.

With regard to Bulgaria, currently, Bulgartransgaz acts as a combined gas operator since it carries out the duties of transmission of natural gas and storage of natural gas and additionally, carries out the duties regarding the gas transit through Bulgaria. The company possesses two licences dating back to 2006 separately for each of these both activities, namely the transmission through national grid to distribution companies and non-household customers; transmission by means of transit network through Bulgaria to Romania, Turkey, Greece, Republic of Northern Macedonia and Serbia and storage through the UGS (underground gas storage) Chiren connected to the national transmission network with main purpose to cover the seasonal fluctuations in demand and nevertheless, guarantee the security of supply²¹⁸.

The Chiren underground storage facility covers only seasonal variations of demand. It is not a multi-cycle storage facility allowing injection and withdrawal multiple times a year. On the contrary, it can be injected in the summer and withdrawn in the winter and the storage capacity is allocated according to a schedule for gas injections in the summer and a schedule for gas withdrawals in the winter²¹⁹.

The importance of the storage facility Chiren is further recognized since Point 6.20 of the fourth list of the PCIs foresees the expansion of the Chiren storage as part of cluster storage capacity increase²²⁰ and the cluster retains its place on the list in the Commission's proposal for the fifth list²²¹.

Bulgartransgaz is the sole transmission system operator acting on Bulgaria natural gas market and is certified as an independent transmission operator by the virtue of Decision C/4 from 22.06.2015 of the Energy and water regulatory commission²²².

²¹⁸ Комисия за енергийно и водно регулиране, Природен газ, Пренос и съхранение / Energy and water regulatory commission (EWRC), Natural Gas, Transmission and storage/ *available only in Bulgarian* < <https://www.dker.bg/bg/priroden-gaz/prenos-2.html> > accessed 20 October 2021; Hiteva, Maltby, Standing in the way by standing in the middle: The case of state-owned natural gas intermediaries in Bulgaria (n 214), 126.

²¹⁹ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 161, 38.

²²⁰ Commission Delegated Regulation (EU) 2020/389 of 31 October 2019 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, C/2019/7772, OJ L 74, 11.3.2020, 1-19.

²²¹ European Commission, Annex to Commission Delegated Regulation amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, (Brussels, 19.11.2021) C(2021) 8409 final < https://ec.europa.eu/energy/sites/default/files/fifth_pci_list_19_november_2021_annex.pdf > accessed 29 November 2021.

²²² Decision No. C-4 of 22.06.2015 of the Energy and Water Regulatory Commission on the Certification of Bulgartransgaz EAD as an Independent Transmission Operator of the gas transmission system in Bulgaria, in compliance with the requirements of Directive/2009/73/EC of the European Parliament and the Council of 13 July 2009 concerning the common rules for the internal market in natural gas and Regulation (EC) 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions

Furthermore, in accordance with Art. 10, Para. 2 of the Third Gas Directive, the designation of Bulgartransgaz has been notified to the Commission²²³.

In its extensive decision EWRC found that Bulgartransgaz complies with the respective provision of the Energy Act and Third Gas Directive with regard to the ITO model.

Obviously, Bulgaria has opted for the weakest of the unbundling regimes which inevitably bring criticism. Despite the fact that some authors claim that '[n]o significant effect of ownership unbundling is detected on end-user prices for households'²²⁴ or even on competition²²⁵, a TSO being part of the VIU raises concerns in terms of cross-subsidization and lack of transparency in terms of information and conflicts of interest.

In addition, by the virtue of Art. 81d of the Energy Act in compliance with Art. 22 of the Third Gas Directive, every TSO annually develops and submits to the EWRC for approval (Art. 21, Para. 3, p. 8 for an ITO) ten-year network development plan (TYNDP) and moreover, the regulator monitors and controls the implementation of that plan. That plan itself and the regulatory control over it, especially on the case of the ITO model ensure that the necessary investments are made despite the structural dependence of the ITO on the VIU and the existing link with the supply-arm²²⁶.

The TYNDP must reflect the market participants, the main transmission infrastructure that needs to be built or upgraded over the next ten years, and nevertheless, it shall contain all the investments already decided and identifying the new investments which need to be executed in the next three years. Additionally, the plan shall report reasonable assumptions about the evolution of the generation or production, supply,

for access to the natural gas transmission networks *[authentic text in Bulgarian]* < https://www.dker.bg/files/DOWNLOAD/res_c-4_en_15.pdf > accessed 20 October 2021.

²²³ Notification of the Government of the Republic of Bulgaria pursuant to Article 10(2) of Directive 2009/73/EC of the European Parliament and the Council ('Gas Directive') concerning common rules for the internal market in natural gas regarding the designation of Bulgartransgaz EAD as a transmission system operator in the Republic of Bulgaria, OJ C 248, 19.12.2015, 10.

²²⁴ Christian Growitsch, Marcus Stronzik, Ownership Unbundling of Gas Transmission Networks – Theoretical Background and Empirical Evidence, Papier für die Jahrestagung 2009 des Vereins für Socialpolitik, Magdeburg (January 2009) < https://www.researchgate.net/publication/228629787_Ownership_Unbundling_of_Gas_Transmission_Networks-Theoretical_Background_and_Empirical_Evidence > accessed 5 October 2021, 18.

²²⁵ Yu, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (n 38).

²²⁶ Jones, EU Energy Law Volume I The Internal Energy Market 5th Edition (n 159), 210, 4,242.

consumption and exchanges with other countries, taking into account investment plans for regional and European Union-wide networks²²⁷.

(E) ICGB

ICGB is a new and crucial company for the Bulgarian gas market since it manages the building of crucial infrastructure necessary to ensure gas supply diversification, namely the IGB pipeline (Interconnector Greece – Bulgaria)²²⁸. The term interconnector finds its legal definition in Art. 2 (17) of the Third Gas Directive and means ‘a transmission line which crosses or spans a border between Member States for the sole purpose of connecting the national transmission systems of those Member States’.

The importance of the IGB project is reflected as it is regarded as a project of common interest and is in the fourth list of the PCIs under Point 6.8²²⁹ and retains its place on the list in the Commission’s proposal for the fifth list²³⁰ similar to the situation with the Chiren storage facility expansion. Although the IGB is placed in Priority Corridor North-South Gas Interconnections in Central Eastern and South Eastern Europe (‘NSI East Gas’), its importance shall be considered with regard to the delivery of Azeri gas to Bulgaria through Southern Gas Corridor where IGB shall be connected to SGC as it will be discussed in details in Chapter V of the thesis.

That interconnector is seen as a tool to deliver the Azeri gas as being the default route for it and furthermore as a tool to diversify Bulgarian natural gas portfolio and even deliver LNG from the Alexandroupolis LNG terminal which shall be connected to the Southern Gas Corridor, respectively TAP²³¹.

²²⁷ European Commission, Interpretative Note, The Regulatory Authorities (n 153), 20.

²²⁸ ‘[T]he joint venture company ICGB AD, registered in Bulgaria in 2011, with shareholders BEH EAD (50%) and IGI Poseidon (50%). The co-shareholder IGI Poseidon is a company, registered in Greece, with shareholders being the Greek public gas corporation DEPA SA (50%) and the Italian energy group Edison SpA (50%). In accordance with its Articles of Association, ICGB AD will be the owner of the IGB gas pipeline and will finance its realization, will allocate its capacity and will receive the revenue from the transportation of natural gas. The IGB gas pipeline will be connected with the Greek national gas transmission system in the area of Komotini and with the Bulgarian national gas transmission system’ (Source: ICGB, About, IGB Project < https://www.icgb.eu/about/igb_project > accessed 9 October 2021).

²²⁹ Commission Delegated Regulation (EU) 2020/389 (n 220).

²³⁰ European Commission, Annex to Commission Delegated Regulation amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest (n 221).

²³¹ ‘The Alexandroupolis Independent Natural Gas System (INGS) project is a modern, cutting edge technology project which comprises an offshore floating unit for the reception, storage and re-gasification of LNG and a system of a subsea and an onshore gas transmission pipeline through which

The role of the ICGB is to develop the IGB interconnector and thus create another link between the Greek and Bulgarian gas systems²³². Although the interconnector should have started to operate in 2020, it is likely to start operating only in 2022 due to a significant delay from the project company.

Initially, the interconnector is planned to secure firm capacity of around 3 bcm yearly from Greece towards Bulgaria²³³. In its second phase it shall ensure physical reverse flow and expansion up to 5 bcm yearly in direction Greece-Bulgaria and from 0 to 2 bcm in direction Bulgaria-Greece but new exemption procedure is required in the second phase in order to cover the new capacity²³⁴.

The IGB pipeline was subject to exemption procedure in accordance with Art. 36 of the 2009 Gas Directive. Since the interconnector affects both – Greece and Bulgaria, the Greek regulatory authority – Regulatory Authority for Energy (RAE) and the Bulgarian one – EWRC, have separately adopted exemption decisions, notified to the Commission²³⁵. In accordance with Art. 36 of the Directive, the Commission has adopted a decision²³⁶.

The Commission's decision addressed all the criteria which shall be taken into account on case-by-case basis listed out above in a previous chapter concerning the exemption procedure. The master thesis aims at pointing out the impact of the IGB on the Bulgarian market only, without focusing on the Greek one.

The investment shall enhance the diversification of supply source based on the firm forward capacity in Bulgaria and furthermore enhance the interconnection capacity between Greece and Bulgaria and thus it addresses directly the security of supply policy of the Union²³⁷ since Bulgaria lacks significant advancement in that respect.

With regard to Bulgaria, the interconnector will enhance the security of supply by diversifying supply source and thus Caspian gas or LNG could be delivered to

the natural gas is shipped into the Greek National Natural Gas System (NNGS) and onwards to the final consumers.

The Alexandroupolis INGS has also the capacity to connect with and transmit gas into other gas transmission systems which are planned in the same geographical region such as TAP (Trans Adriatic Pipeline' (Source: Gastrade, The Company, The Project < <http://www.gastrade.gr/en/the-company/the-project.aspx> > accessed 30 October 2021).

²³² Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria (n 177), Rec. 9.

²³³ *ibid*, Rec. 9.

²³⁴ *ibid*, Rec. 14.

²³⁵ *ibid*, Rec. 1-2.

²³⁶ *ibid*.

²³⁷ *ibid*, 15, Rec. 41 and 42.

Bulgaria and moreover, increase the resilience of the Bulgarian gas system²³⁸ if cases of supply disruption appear.

In terms of competition, it shall play positive role by enabling new players to enter the market and thus Gazprom's dominant position on the upstream level shall be tackled. With regard to the latter, Bulgargaz has booked capacity²³⁹ in order to have the Azeri gas delivered on the ground of the long-term contract signed with its Azeri counterpart.

The interconnector could deliver LNG too when the Alexandroupolis LNG terminal starts operating. The LNG would broaden the portfolio of gas entering the Bulgarian market physically.

Furthermore, the Commission points out also that the interconnector would allow new players to enter the downstream market and thus put in jeopardy the dominant position of Bulgargaz on that level of the market²⁴⁰.

In order to ensure compliance not only with the aim of the exemption regime but to abide by the competition policy, the decision of the Commission envisages that any undertaking holding a dominant position is not allowed to reserve more than 40 % capacity, which means that (i) Bulgargaz cannot reserve more than 40 % and (ii) new market players are able to reserve at least 60 % of the IGB capacity²⁴¹. Moreover, that capacity cap is envisaged to prevent a dominant player to strengthen its market power since any gas delivered to Bulgargaz shall be considered as the capacity is booked by Bulgargaz meaning that no volume above the capacity cap shall be delivered to Bulgargaz²⁴².

In terms of investment risk, the IGB project is considered as a link of chain of investments that shall secure the delivery of Azeri gas to the Union, particularly to Bulgaria²⁴³.

Nevertheless, the exemption period of 25 years is equivalent to the longest contracts for gas supply so that the supply and transportation contracts match the duration of

²³⁸ *ibid*, 18, Rec. 60.

²³⁹ *ibid*, 23, Rec. 87(a).

²⁴⁰ *ibid*, 23, Rec. 87(b).

²⁴¹ *ibid*, 23, Rec. 87(c).

²⁴² *ibid*, 24, Rec. 91.

²⁴³ *ibid*, 27, Rec. 113.

the exemption period²⁴⁴ and Bulgargaz has booked advanced capacity for 25 years²⁴⁵ corresponding to the agreement with SOCAR for Azeri gas and to ensure capacity for the 25-year gas supply contract²⁴⁶. However, it shall be noted that capacity reservations and priority reservations are necessary for construction of new infrastructures but only for limited period of time²⁴⁷.

Based on the ICGB's shareholders, the requirement for separation of the owner of the infrastructure is complied with and it is different from the current sole TSO in Bulgaria – Bulgartransgaz.

The project, from the Union's policy view, will enhance interconnection between Greece and Bulgaria and increasing liquidity of the internal gas market²⁴⁸.

Furthermore, IGB is granted an exemption from the ownership unbundling regime but it shall be certified in both Member States – Greece and Bulgaria as an ITO, with the exception of Art. 22 of the 2009 Gas Directive²⁴⁹ concerning the ten-year network development plan.

Furthermore, regarding the financial risks and investments, in 2018 the Commission announced that it has approved support measures for the construction of the project which comply with the state aid rules where the total cost for realizing the project amounts to EUR 240 million²⁵⁰. The particular measure notified to the Commission comprises several elements, namely: (i) a direct contribution from the Bulgarian State budget via the Operational Programme Innovations and Competitiveness to be granted by the Ministry of Economy of EUR 39 million; (ii) a State guarantee granted by the Bulgarian State via the Ministry of Finance of Bulgaria to cover 100% of the EUR 110 million EIB loan to BEH; additionally EUR 45 million direct contribution from the European Energy Programme for Recovery (EEPR); (iii) an Intergovernmental Agreement (IGA) between Greece and Bulgaria on corporate income tax stabilization providing ICGB AD with a fixed corporate income tax regime

²⁴⁴ *ibid*, 27-28, Rec. 115.

²⁴⁵ *ibid*, 5, Rec. 25.

²⁴⁶ *ibid*, 28, Rec. 119.

²⁴⁷ Talus, EU Energy Law and Policy: A Critical Account (n 168), 97.

²⁴⁸ Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria (n 177), 33, Rec. 151.

²⁴⁹ *ibid*, 35, Rec. 163.

²⁵⁰ European Commission, Press corner, State aid: Commission approves public support for natural gas interconnector between Greece and Bulgaria, IP/18/6342 (8 November 2018) < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_6342 > accessed 29 November 2021.

for the first 25 years of the project²⁵¹. With the decision adopted, the Commission declared the notified measure compatible with the EU state aid law.

(F) BALKAN GAS HUB

Another important state-owned company which lately appeared on the gas market is the Balkan Gas Hub EAD which is established in 2019 and 100 percent owned by Bulgartransgaz with the aim to become a distribution hub on the territory of Bulgaria. It operates trading platforms with natural gas²⁵².

The importance of the national hub is reflected through its placement in the fourth list of the projects of common interest (PCIs) under Point 6.8²⁵³ and retains its place on the list in the Commission's proposal for the fifth list²⁵⁴.

It is relatively new market player and since Bulgarian market lacks liquidity currently, its role is gaining importance with insufficient degree. Currently under the Gas Release Program Balkan Gas Hub provides the public supplier Bulgargaz with the software and the commercial environment for the release of gas quantities²⁵⁵.

However, the efficiency may be put in question since in 2020 only 33,29 % of the gas quantities offered under the Gas Release Programme have been realized on the auctions held²⁵⁶.

3. Detailed analysis of the national market

(A) Introductory observations

Being economically strongly influenced by the Soviet Union until 1989 Bulgaria has been heavily reliant on gas imports from Russia. Moreover, the transmission infrastructure was constructed in the 1970s in a way to allow centralized link between

²⁵¹ Commission Decision of 8.11.2018, State aid SA.51023 (2018/N) – Bulgaria and SA.52049 (2018/N) – Greece, State aid for the implementation of Gas Interconnector Greece-Bulgaria, C(2018) 7295 final (Brussels, 8.11.2018) Public version https://ec.europa.eu/competition/state_aid/cases/276000/276000_2047286_133_2.pdf > accessed 29 November 2021, 5-6, Rec. 16-17.

²⁵² Balkan Gas Hub, About us, About The Company < <https://www.balkangashub.bg/en/about-us/company> > accessed 29 November 2021.

²⁵³ Commission Delegated Regulation (EU) 2020/389 (n 220).

²⁵⁴ European Commission, Annex to Commission Delegated Regulation amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest (n 221).

²⁵⁵ Balkan Gas Hub, Products and Services, GRP Segment < <https://www.balkangashub.bg/en/products/grp> > accessed 29 November 2021.

²⁵⁶ Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, Annual Report to the European Commission, July 2021 < <https://www.dker.bg/uploads/2021/annual-rep-ec-jul2021.pdf> > accessed 15 October 2021, 34.

Russia and Bulgaria²⁵⁷. Bulgaria has been undergoing long and hard way to market-based economics and the transition is still in the process and has not finished yet.

Bulgaria is considered relatively a small market with around 3 bcm annual consumption of natural gas. Due to the negligible domestic production²⁵⁸, Bulgaria is entirely dependent on imports and nonetheless until the beginning of 2021, on one sole supplier, namely Gazprom. Until the beginning of the 2020 the gas to Bulgaria used to come through the route via Russia-Ukraine-Moldova-Romania through IPs Negru Voda 1/Kardam and Negru Voda 2,3/Kardam²⁵⁹, but Gazprom changed the entry point at the Bulgaria-Turkey border namely at IP Strandja 2/Malkochlar²⁶⁰ with import capacity around 54 mcm/day²⁶¹.

Although the public supplier, holding dominant position on wholesale level of the market (Bulgargaz) and currently the only TSO (Bulgartransgaz), are part of the VIU (BEH), Bulgaria has found a way to legally comply with the unbundling regime requirements by means of certifying Bulgartransgaz as an independent transmission operator (ITO).

What could be argued is that BEH is not fully independent from the Government since as it was already mentioned, the Minister of Energy exercises the rights of the state as a shareholder and that would potentially put in jeopardy the decision-making process of its managers. However, its subsidiaries Bulgargaz and Bulgartransgaz shall have their independence from the government and thus act in their own business interest. Thus, these state-owned intermediaries could be an obstacle to the liberalization process on the national market²⁶².

Both – Bulgargaz and Bulgartransgaz play crucial role for the whole market since they could be construed as intermediaries, where an intermediary shall be defined as organization strategically located in-between the regulator and regulated public and private actors or sets of different societal interest²⁶³. In the case of Bulgaria these state-owned intermediaries, part of the VIU BEH, are positioned between the upstream

²⁵⁷ Hiteva, Maltby, Standing in the way by standing in the middle: The case of state-owned natural gas intermediaries in Bulgaria (n 214), 127, 122-123.

²⁵⁸ For 2020, the public supplier Bulgargaz has purchased 0,003% volume from local production; Source: EWRC, Annual Report to the European Commission, July 2021 (n 256), 39.

²⁵⁹ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 12.

²⁶⁰ EWRC, Annual Report to the European Commission, July 2021 (n 256), 34.

²⁶¹ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 12.

²⁶² Hiteva, Maltby, Standing in the way by standing in the middle: The case of state-owned natural gas intermediaries in Bulgaria (n 214), 126, 128.

²⁶³ *ibid*, 120.

segment (ignoring the negligible domestic production, Bulgargaz is the largest importer of natural gas) and the downstream retail market (distribution and end supply). Nevertheless, these two companies, being subsidiaries of BEH, have respectively dominant position in the supply segment and monopoly over the transmission and storage segment and therefore BEH could be construed as setting the direction of the market and could potentially foreclose it for the competitors of Bulgargaz in wholesale supply. Therefore, the market shall be discussed in details from supply, transmission and regulatory point of view²⁶⁴ and additionally with regard to the interconnectivity and the rate of the liberalization introduced on the market.

(B) Wholesale supply

At wholesale level, Bulgargaz is the main player. Nevertheless, there are two production companies on the market, namely Oil and Gas Exploration and Production AD and Petroceltic Bulgaria EOOD which constitute negligible percentage of the gas purchased by Bulgargaz in 2020²⁶⁵. Therefore, the national production plays no significant role with regard to competition enhancement at that level of the market. Being the public supplier and carrying out services of public interest, Bulgargaz is the largest gas purchaser. Although more than 30 private companies have been issued a license to trade with natural gas, the market is highly concentrated and dominated from Bulgargaz where it supplies gas not only to heating plant companies but to large industrial consumer acting in activities such as metallurgy, chemical industries and others²⁶⁶.

Thus said, it is not surprising that Bulgargaz holds dominance on the downstream wholesale supply of natural gas and retail supply to large end customers connected to the transmission grid²⁶⁷.

At the retail level of the market the gas supply is transported out either by Bulgartransgaz for those customers directly connected to the transmission grid or by distribution companies for the end customers. Although at the end 2020 24 distribution companies were licensed, the distribution infrastructure is still under

²⁶⁴ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28).

²⁶⁵ EWRC, Annual Report to the European Commission, July 2021 (n 256), 39.

²⁶⁶ *ibid*, 40.

²⁶⁷ Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria (n 177), Rec. 57.

construction and in development while the number household customers connected to the transmission grid is low²⁶⁸.

Currently the Bulgarian gas market is a hybrid one, since by the virtue of Art. 181 of the Energy Act, there is (i) a regulated market in events where there is service of public interest regarding the transmission, distribution and supply of natural gas and (ii) free market in any other case. From 2020 on, outside the scope of the regulated market are the customers connected to the transmission grid, besides those licensed to produce and transmit heating energy. Therefore, regulated and market prices coexist on the national market.

Based on the 2020 amendments of the Energy Act, in 2020 the public provider Bulgargaz sold at prices regulated by the EWRC 44,51 % share of its sales for 2020 and 52,54 % share on freely negotiated prices while the rest 2,95 % share is on the Gas Release Programme²⁶⁹. To illustrate the difference, in 2019 the share of sales under regulated prices was 99,58% and the share of gas sold under freely negotiated prices – 0,42%²⁷⁰.

Bulgargaz has a dual role too and in my view it is a crucial incumbent for the development of the national market as a whole. On one hand it 'shall conclude transactions at freely negotiated prices in its capacity as a liquidity provider, a trader and a market maker' while on the other hand it sells gas on regulated by EWRC prices to exclusively listed customers when carrying out services of public interest²⁷¹.

With respect to regulated prices, the public supplier Bulgargaz sells gas on regulated prices to end suppliers and persons licensed to produce and distribute heating energy (Art. 178b of the Energy Act).

However, Bulgargaz faces limited competition and hold not only dominant position but nearly monopolizes the natural gas market in Bulgaria²⁷² specifically in the regulated part of the market where the company holds monopoly being the only public supplier for natural gas. Based on the interconnectivity of Bulgaria with its neighbouring states, in 2018 the import capacity was around 0,3 bcm from Greece and

²⁶⁸ EWRC, Annual Report to the European Commission, July 2021 (n 256), 43.

²⁶⁹ Bulgargaz, About, Finance Results, Financial Statements 2020, Annual management report. Annual financial statements. Independent auditor`s report of December 31st 2020 < <https://www.bulgargaz.bg/upload/editorfiles/files/gfo2020.pdf> > accessed 4 January 2022, 6.

²⁷⁰ *ibid.*

²⁷¹ EWRC, Annual Report to the European Commission, July 2021 (n 256), 38.

²⁷² Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria (n 177), Rec. 84.

around 0.03 bcm from Romania²⁷³. These capacities are unlikely to put in jeopardy the positions Bulgargaz has on the wholesale supply segment.

(C) Transmission segment

In general, the value chain of gas market by means of which the gas is delivered is built on production/import, transportation (transmission and distribution) and other related services such as storage and all of these enable the supply to the end customers²⁷⁴.

Thus, partial liberalization could create an event where some link of that chain could be organized as competitive one while others would remain a natural monopoly²⁷⁵. System operation of transmission and storage are most likely to constitute natural monopoly²⁷⁶, especially in case of Bulgaria where Bulgartransgaz is at that point the sole transmission system operator and storage system operator and operates both the only transmission grid and storage facility.

Bulgartransgaz has been certified as an ITO meaning that Bulgaria has complied with the liberalization policy despite its monopoly over the grid. Nevertheless, Bulgaria has gone a long way to ensure that it has eight cross-border entry-exit points²⁷⁷. Despite that, the ITO model raises three types of concerns where the TSO remains part of the VIU, namely (i) affiliated subsidiaries of the VIU are treated better than its third party competitors; (ii) information transparency is in jeopardy since no effective tools exist to prevent sensitive information exchange with the supply incumbent; (iii) underinvestment is likely to occur²⁷⁸.

Hence, certain instruments of the liberalization policy are capable of tackling these concerns. While the TPA and regulatory intervention with regard to it shall secure non-discriminatory access to the grids, the prohibition of sharing the same premises and IT systems is likely to prevent the information exchange and last but not least, the TYNDP shall ensure the necessary investments are to be made by the TSO.

²⁷³ *ibid*, Rec. 85.

²⁷⁴ Egenhofer, Gialoglou, Rethinking the EU Regulatory Strategy for the Internal Energy Market (n 111), 16.

²⁷⁵ *ibid*, 17.

²⁷⁶ *ibid*, 17.

²⁷⁷ Bulgartransgaz, Customer Zone, Gas infrastructure description < <https://www.bulgartransgaz.bg/en/pages/gaz-infra-54.html> > accessed 15 November 2021

²⁷⁸ Bartłomiej Nowak, Challenges of liberalization. The case of Polish electricity and gas sectors, Yearbook of Polish European Studies (2(2), 2009) 141 – 168 < https://mpr.a.uni-muenchen.de/23804/1/MPRA_paper_23804.pdf > accessed 15 November 2021, 150.

In theory, it is generally viewed that a regulator without independence from the government cannot reach maximum effectiveness. However, it can be argued that a regulator could be effective and successful if it takes fair and justifiable recommendations and carries out its operations in a fair and transparent way²⁷⁹.

With regard to the network tariffs, since 1 October 2017 Bulgartransgaz has introduced the entry-exit tariff model for pricing access and transmission through the transmission grid²⁸⁰. That pricing model is envisaged by the Commission as the most appropriate to ensure non-discriminatory access since all users of the network grids are charged the same prices for a particular entry respectively exit points²⁸¹.

On the contrary, the previous model (the so-called 'postage stamp') has fixed a price charged at the entry for the usage of the physical capacity regardless of the distance of gas transmission and thus has not reflected the transportation costs with respect to the long-distant customers and short-distant customers²⁸².

(D) Distribution segment

Gas distribution companies carry out the activities of distribution and supply by end supplier since they supply gas to customers, connected to the respective distribution networks²⁸³. In 2020 the share of gas supplied to distribution companies by Bulgargaz is 10 %²⁸⁴. At the end of 2020 24 gas distribution companies were licensed and the number of their clients at the end of 2020 was 132 424, of which non-household 7 772 and 124 652 household customers²⁸⁵. Few more details relating to the household customers will be given in Chapter VI.

²⁷⁹ Jon Stern, What Makes an Independent Regulator Independent?, Business Strategy Review (Volume 8, Issue 2, June 1997) 67-74 < <https://doi.org/10.1111/1467-8616.00027> > accessed 13 November 2021, 73.

²⁸⁰ Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, Annual Report to the European Commission, July 2018 < <https://www.dker.bg/PDOCS/ann-rep-ewrc-to-ec-2018.pdf> > accessed 18 November 2021, 39.

²⁸¹ Commission of the European Communities, Commission Staff Working Document on tariffs for access to the natural gas transmission networks regulated under Article 3 of Regulation 1775/2005 (Brussels, 20.4.2007), SEC(2007) 535, Rec. 3.

²⁸² Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 44.

²⁸³ Комисия за енергийно и водно регулиране, Природен газ, Разпределение и снабдяване от краен снабдител / Energy and Water Regulatory Commission, Natural Gas, Distribution and Supply by End Supplier / available only in Bulgarian < <https://www.dker.bg/bg/priroden-gaz/razpredelenie-i-snabdyavane-ot-kraen-snabditel.html> > accessed 12 January 2022.

²⁸⁴ EWRC, Annual Report to the European Commission, July 2021 (n 256), 40.

²⁸⁵ *ibid*, 43,44.

(E) Regulatory Environment

With regard to the national regulator, EWRC has not always been at least *de lege* independent from the government. According to Art. 11, Para. 2 of the Energy Act the chairperson and the members of the EWRC are elected by a decision of the National Assembly. However, until the amendment of the Energy Act in 2015 with respect to EWRC the chairperson and the members of the EWRC used to be elected by the Council of Ministers and respectively appointed by the Prime Minister, which created preconditions for political dependence on the Government and lack of transparency in terms of nominations²⁸⁶. The regulator has to ensure level-playing field for all the market players. Since the transmission segment is highly monopolized in Bulgaria and will remain such due to its network-based character and since transmission is seen by the Energy Act as a service of public interest, EWRC is the one that monitors the functioning of the market and ensures the third-party access and unbundling.

Nevertheless, since 2019 the budget of the NRA is part of the state budget in order to ensure the financial independency from the government. Being part of the state budget, EWRC's budget is approved annually by the National Assembly.

(F) Interconnectivity with neighboring countries

With respect to the gas infrastructure, the market linkage with neighboring countries is allowing new players to emerge and thus enhances competition. The liberalization policy and the aim of creating an internal market for gas shall create physical and regulatory linkages between neighboring Member States' markets where these linkages would offer better export or import opportunities²⁸⁷.

With regard to infrastructure interconnectivity, as mentioned above, Bulgaria has eight operating interconnection points with its neighbouring countries. Since interconnectivity with neighbouring EU Member States enhances not only the achievement of the internal market for gas but the security of supply policy of the Union (see Chapter V), the interconnectivity with Greece and Romania shall be discussed separately from those with Republic of North Macedonia, Serbia and Turkey.

²⁸⁶ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 41.

²⁸⁷ *ibid*, 10.

1. Interconnectivity with neighboring EU Member States

With that regard, Bulgaria struggles to build new infrastructure so that to put itself in better position by creating stronger market linkage with its neighboring Member States, namely Greece on the south-east and Romania on the north²⁸⁸. Moreover, currently four interconnection points (IPs) exist between Bulgaria and respectively Romania (three IPs) and Greece (one IP), namely²⁸⁹:

(i) Interconnection point (IP) Negru Voda 1/Kardam – connection between Bulgartransgaz gas transmission system and the gas transmission system operated by Transgaz S.A. (Romania) on the Bulgarian-Romanian border in the area of Negru Voda/Kardam;

(ii) Interconnection point (IP) Negru Voda 2, 3/Kardam – connection between Bulgartransgaz EAD gas transmission system for transit transmission and the gas transmission system operated by Transgaz on the Bulgarian-Romanian border in the area of Negru Voda/Kardam;

(iii) Interconnection point (IP) Ruse/Giurgiu – connection between Bulgartransgaz EAD national gas transmission system and the gas transmission system operated by Transgaz on the Bulgarian-Romanian border in the area of Ruse/Giurgiu;

(iv) Interconnection point (IP) Kulata/Sidirocastro – connection between Bulgartransgaz EAD gas transmission network for transit transmission and the gas transmission system operated by DESFA S.A. (Greece), located on the Bulgarian-Greek border in the area of Kulata/Promachonas; from 2020 on the capacity at Kulata/Sidirocastro in direction Greece-Bulgaria is around 6 mcm/day²⁹⁰;

The Interconnector Bulgaria-Romania (IBR) at IP Ruse/Giurgiu provides 1,5 bcm/year bidirectional gas transmission capacity from Bulgaria to Romania or *vice*

²⁸⁸ See further about the gas infrastructure of Bulgartransgaz on: Bulgartransgaz, Gas infrastructure description (n 277).

²⁸⁹ Bulgartransgaz, Business development, TEN-YEAR NETWORK DEVELOPMENT PLANS OF "BULGARTRANSGAZ" EAD, 2020 - 2029 Ten-Year Network Development Plan of Bulgartransgaz EAD, approved by the Company Management Board by Protocol № 430/18.03.2020, approved by the EWRC with Decision № ДИПМ-1 dated 30.07.2020 < <https://www.bulgartransgaz.bg/files/useruploads/files/amd/TYNDP%202020-2029%20EN.pdf> > accessed 2 January 2022, 11.

²⁹⁰ *ibid.*

*versa*²⁹¹. As of 1 November 2019, the capacity at that IP in Bulgaria-Romania direction is around 2,5 mcm/day and in the opposite direction – around 2,55 mcm/day²⁹². Meanwhile the IP Negru Voda 1/Kardam enables transmission capacity from Bulgaria to Romania of around 11,5 mcm/day²⁹³.

Nonetheless, another capacity increase is on the agenda that concerns Bulgaria, namely the ROHU/BRUA which is again seen as a project of common interest and is in the fourth list of the PCIs under Point 6.24²⁹⁴ and retains its place on the list in the Commission's proposal for the fifth list²⁹⁵. The project envisages a 1,5 m³/year bidirectional gas transmission capacity from Romania to Bulgaria and *vice versa* (namely the Interconnector Bulgaria-Romania) and 4,4 m³/y from Romania to Hungary and *vice versa* as a route to transport gas from the Black Sea fields through Romania and Hungary to Baumgarten hub in Austria. Moreover, that route would enable the Caspian gas to enter the European market in Central and Eastern Europe²⁹⁶.

2. Interconnectivity with non-EU countries

However, Bulgaria has IPs with neighboring countries outside the EU, namely with Turkey (two IPs), with Republic of North Macedonia (one IP) and since 2021 with Serbia (one IP), namely²⁹⁷:

- (i) Interconnection point (IP) Strandzha/Malkoclar – connection between Bulgartransgaz EAD transmission network for transit transmission and the gas transmission system operated by Botas (Turkey), located on the Bulgarian-Turkish border in the area of the village of Strandzha, Bolyarovo municipality;
- (ii) Interconnection point (IP) Strandzha 2/Malkoclar – connection between Bulgartransgaz EAD transmission network for transit and the gas transmission system operated by TAGAS (Turkey), located on the Bulgarian-Turkish border in the area of the village of Strandzha, Bolyarovo municipality;

²⁹¹ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 24.

²⁹² *ibid.*, 12.

²⁹³ *ibid.*

²⁹⁴ Commission Delegated Regulation (EU) 2020/389 (n 220).

²⁹⁵ European Commission, Annex to Commission Delegated Regulation amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest (n 221).

²⁹⁶ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 24.

²⁹⁷ Bulgartransgaz, 2020 - 2029 Ten-Year Network Development Plan (n 289), 11; Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 10.

(iii) Interconnection point (IP) Kyustendil/Zidilovo – connection between Bulgartransgaz EAD transmission system for transit transmission and the gas transmission system operated by GA-MA (Macedonia), located on the Bulgarian-Macedonian border in the area of the village of Guyeshevo, Kuystendil municipality;

(iv) Interconnection point (IP) Kireevo/Zaycar – connection between Bulgartransgaz EAD gas transmission network and the gas transmission system operated by Gastrans (Serbia), located on the Bulgarian-Serbian border in the area of the village of Kireevo, Makresh Municipality;

The IP Strandzha 2/Malkoclar at the border with Turkey ensures daily entry capacity of around 54,86 mcm²⁹⁸ and that is the IP where Bulgargaz has the imported from Russia gas delivered to Bulgaria.

Moreover, the only IP with Republic of North Macedonia ensures 0,8 bcm yearly capacity²⁹⁹.

With regard to infrastructure investments, another crucial interconnection project that is on the agenda is the Interconnector Bulgaria – Serbia (IBS) which is seen as a project of common interest and is in the fourth list of the PCIs under Point 6.8³⁰⁰ and retains its place on the list in the Commission's proposal for the fifth list³⁰¹. The gas interconnection Sofia (Bulgaria) - Dimitrovgrad (Serbia) - Nis (Serbia) shall connect national transmission networks of Bulgaria and Serbia aiming to ensure diversification of routes and moreover, increase intersystem linkage in terms of gas transmission³⁰². I find appropriate to point out the project is developed by Bulgartransgaz³⁰³ not by a different project company as it is the case with the IGB. Although its construction has not started yet, it is expected to ensure 1,8 bcm yearly bidirectional capacity with potential increase up to 4,5 bcm/yearly³⁰⁴. Among the

²⁹⁸ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 12.

²⁹⁹ *ibid*, 25.

³⁰⁰ Commission Delegated Regulation (EU) 2020/389 (n 220).

³⁰¹ European Commission, Annex to Commission Delegated Regulation amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest (n 221).

³⁰² Ministry of Energy, Gas Interconnection Bulgaria - Serbia (IBS) < <https://www.me.government.bg/en/themes/gas-interconnection-bulgaria-serbia-ibs-912-0.html> > accessed 6 January 2022.

³⁰³ Bulgartransgaz, Business development, PCI, 6.8.3. Gas Interconnection Bulgaria – Serbia (IBS) < <https://www.bulgartransgaz.bg/en/pages/6-8-3-mezhdusistemna-gazova-vrazka-balgariya-sarbiya-ibs-191.html> > accessed 12 January 2022.

³⁰⁴ Ministry of Energy, Gas Interconnection Bulgaria - Serbia (IBS) (n 302) ; Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 28.

benefits of the project are outlined the diversification of natural gas supplies, enhancement of the security of supply to Bulgaria and the region and incentive to gradual increase in natural gas consumption³⁰⁵.

It is important to note that Republic of North Macedonia, Serbia and Turkey are in negotiations for their EU membership³⁰⁶. Thus said, the interconnection with these countries should have positive effect on the gas-to-gas competition in Bulgaria and on the internal gas market when these countries join EU.

Thus said, currently the idea about merging Romanian and Bulgarian gas markets³⁰⁷ may sound exotic due to the slow infrastructure development and the lagging rate of liberalization³⁰⁸. However, having the IBR operating, having the IGB in construction and the IBS being projected, the liquidity in the whole region would be increased and lead will to supply diversification³⁰⁹. It must be further recognized that in 2019 Romania satisfied 85 % of its total consumption of 11,2 bcm from its domestic production³¹⁰ being the third largest natural gas producer in the EU in 2018³¹¹. Hence, not only Bulgaria and Romania are expected to profit from that enlargement but also the neighbouring countries (such as Greece, Serbia or Hungary) due to the regional higher liquidity and thus adding Hungary and Greece to the regional merger³¹².

Yet, it is not surprising that the idea about a Vertical Gas Corridor is on the horizon aiming to ensure uninterrupted and constant gas flow from Greece to Bulgaria and Romania and to other countries such as Hungary and Slovakia³¹³ where it envisages a route comprising the IGB, IBR and IBS pipelines. Thus, in 2017 A Memorandum of Understanding on the realization of the Vertical Gas Corridor was signed by

³⁰⁵ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 57.

³⁰⁶ European Commission, European Neighbourhood Policy and Enlargement Negotiations, Enlargement, Negotiations status < https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/negotiations-status_en > accessed 6 January 2022.

³⁰⁷ European Commission, Directorate-General for Energy, Quo Vadis EU gas market regulatory framework - Study on gas market design for Europe (Luxembourg, Publications Office of the European Union, 2018) < https://ec.europa.eu/energy/sites/ener/files/documents/quo_vadis_report_16feb18.pdf > accessed 22 December 2021, 151.

³⁰⁸ *ibid.*

³⁰⁹ *ibid.*

³¹⁰ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 23

³¹¹ European Commission, Quo Vadis EU gas market regulatory framework - Study on gas market design for Europe (n 307), 152.

³¹² *ibid.*

³¹³ Anastasios Mastrapas, Nicholas Sofianos, Costis Stambolis, The "Vertical Corridor" from the Aegean to the Baltic, Institute of Energy for S.E. Europe (IENE), An IENE Study Project (M26) (Athens, May 2015) < <https://www.iene.eu/articlefiles/the%20vertical%20corridor%20-%20from%20the%20aegean%20to%20the%20baltic.pdf> > accessed 20 October 2021, 33.

representatives of the gas companies from Bulgaria, Greece, Hungary and Romania aiming to realize the corridor for bi-directional natural gas transport, interconnecting the networks of Bulgaria, Greece, Romania and Hungary³¹⁴. Hence, the Vertical Gas Corridor would provide gas from the Southern Gas Corridor and LNG to South Eastern and Central Eastern Europe, and even to Ukraine³¹⁵. Moreover, that corridor received political encouragement in 2015 being considered by the Bulgarian Minister of Energy as a tool to strengthen the regional energy co-operation through providing security and diversification of natural gas supply corresponding to the EU policy in that regard³¹⁶.

(G) The rate of introducing liberalization on the national market

While the Third Energy Package should have been implemented into national law of the Member States until 3 March 2011 as prescribed by Art. 54, Para. 1 of the 2009 Gas Directive, Bulgaria failed to do so. Thus, almost a year after the due date, in February 2012 the Commission threatened 8 Member States, inter alia Bulgaria, with the Court of Justice for their failure to implement the Third Energy Package³¹⁷.

Despite the fact that the national market is *de lege* liberalized since the market opening is transposed into national law, the *de facto* situation may differ due to the fact that the rate of change of choice of supply among the end customers is 0 as it will be further observed below in Chapter VI dealing with the final customers. However, it could be argued additionally based on the *de facto* situation, that the quasi or hybrid liberalization is evident on the Bulgarian market for natural gas.

Moreover, as a consequence of that quasi liberalization some markets have developed into highly concentrated ones and monopolies for certain product markets have occurred. Market concentration in production/import and/or supply could hinder

³¹⁴ ICGB, Gas companies from Bulgaria, Greece, Romania and Hungary signed a memorandum of understanding on the vertical gas corridor (19.07.2017) < <https://www.icgb.eu/gas-companies-signed-memorandum-of-understanding-on-the-vertical-gas-corridor> > accessed 8 January 2022.

³¹⁵ ICGB, IGB's status update was discussed at the 7th Ministerial Meeting of the Southern Gas Corridor Advisory Council (11.02.2021) < <https://www.icgb.eu/igbs-status-update-was-discussed-at-the-7th-ministerial-meeting-of-the-southern-gas-corridor-advisory-council> > accessed 8 January 2022.

³¹⁶ Ministry of Energy, News, Highlights, Vertical Gas Corridor completely corresponds to the EU aim to achieve energy security and diversification (24 April 2015) < <https://www.me.government.bg/en/news/vertical-gas-corridor-completely-corresponds-to-the-eu-aim-to-achieve-energy-security-and-diversification-2015.html?p=eyJ0eXBlljoiaG90bmV3cyIsInBhZ2UiOjd9> > accessed 8 January 2022.

³¹⁷ European Commission, Press corner, Press release Internal energy market: national legislation in 8 Member States still not in line with EU rules, IP/12/181 (27 February 2021) < https://ec.europa.eu/commission/presscorner/detail/en/IP_12_181 > accessed 14 November 2021.

new entrants, curtail liquidity and inhibit true price disclosure³¹⁸. Thus, here comes the role of the competition and regulatory authorities which shall ensure compliance with the instruments of the liberalization policy such as unbundling and TPA and in cases of regulated prices, to prevent the excessive pricing by the national champion (VIU) allowing it to cross-subsidize its activities in the different segments.

Such national champion in Bulgaria could be identified in the face of BEH, which consolidates both – the public supplier Bulgargaz which holds the dominant position in the import and supply segment and Bulgartransgaz which operates the transmission and storage infrastructures.

Bulgaria has gone a long way to liberalization of its gas sector and although many obstacles that prevented the efficient and competitive market has been removed, some shortcomings are still evident.

It is clearly evident that in terms of structure, BEH's subsidiaries Bulgargaz and Bulgartransgaz still monopolize the segments respectively of supply and transmission and therefore the wholesale market is highly concentrated since Bulgargaz holds dominant position as the biggest supplier on the market. However, it shall be noted that the TSO Bulgartransgaz is already certified as an ITO and thus complies with the unbundling regime and both companies have different seats, premises and staff in order to have the exchange of commercially sensitive information prevented.

There is a positive trend with respect to the pricing since in that regard the market is hybrid one and thus Bulgaria is gradually trying to introduce the market pricing but at the same time the idea about protection of the vulnerable customers is still kept in mind. It could be easily argued that the role of the public supplier is crucial for the market control since only one public supplier could be licensed as such and moreover, it sells under regulated prices in exclusively listed events. That regulatory intervention has been viewed beneficial as protecting the consumers against bad market practices³¹⁹. With respect to the price, it is clearly important that in 2020 Bulgargaz negotiated with Gazprom new hybrid price formula which reflects to great extent the liquidity of Western European markets and thus allows Bulgaria to receive gas on competitive prices with respect to the long-term contract with Gazprom. Thus,

³¹⁸ Egenhofer, Gialoglou, Rethinking the EU Regulatory Strategy for the Internal Energy Market (n 111), 24.

³¹⁹ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 59.

the Gazprom Case introduced a negotiating method for Bulgaria to have the natural gas price reflecting liquid markets.

In contrast, there is a negative indication is that despite the *de lege* market opening, the rate of supplier switching is 0. The number of the gasified households is low and on the other hand the DSOs are licensed for specified territories which makes it even harder for a customer to switch its supplier.

Energy release programmes were seen by the Commission as a tool to tackle the market concentration yet in 2005 within the Energy Sector Inquiry Report³²⁰. Still in Bulgaria, with amendments and supplements to the Energy Act, gas release programmes for the public supplier were prescribed as of 2020. That gas release programme would improve market transparency since the price would reflect market conditions.

Despite that in 2021 Bulgaria diversified its gas import portfolio with Azeri gas, the full liberalization is still not evident on the horizon, but still with the construction of the IGB project hopefully in 2022, Bulgaria will have another supply route and that would also stimulate market liberalization since the public supplier does not hold monopolized capacity and thus new suppliers would potentially enter the market. Moreover, having the Alexandroupolis LNG terminal (where Bulgarian TSO Bulgartransgaz holds 20 % of the shares³²¹) constructed in 2023, the IGB pipeline could deliver LNG to Bulgaria. Thus, diversification of supply source would be introduced on the national market.

Moreover, ICGB will be TSO managing the IGB pipeline and thus competition in terms of transmission segment is likely to appear on the Bulgarian market.

Despite the fact that several dozen companies have been issued a license to trade with natural gas, the public supplier is still retaining its dominant position and moreover, it carries out activities prescribed by the Energy Act as services of public interest.

With regard to the transmission segment, infrastructure investments are inevitable in order to increase household gasification and develop the national grid at all. Achieving higher percentage of household gasification could increase customers using natural gas and thus enhance the liberalization. Moreover, if infrastructure

³²⁰ Commission of the European Communities, Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (n 88), Rec. 43.

³²¹ Gastrade, News and Press releases, Participation of Bulgartransgaz in the Alexandroupolis LNG Terminal < <http://www.gastrade.gr/en/the-company/news-press-releases/participation-of-bulgartransgaz-in-the-alexandroupolis-lng-terminal.aspx> > accessed 2 January 2022.

investments are made by the private companies acting on the market, that would increase the gas prices for the end customers, while if they were made by the state-owned companies, their role as a social buffer for the end customers would be jeopardized on the same grounds – price increases³²².

The high market concentration on the market is seen as an obstacle to competition resulting in higher prices and market foreclosure at wholesale and retail level of the market. Where the market is highly concentrated, the regulatory environment is not sufficiently influencing the market³²³.

On the other hand, in the case of Bulgaria, despite the high market concentration, Bulgargaz manages to offer lower prices than the competitive ones in Europe. However, as a result of it, it barely has competition in the wholesale supply segment.

³²² Hiteva, Maltby, *Standing in the way by standing in the middle: The case of state-owned natural gas intermediaries in Bulgaria* (n 214), 128.

³²³ Stela Rumenova Nenova, *Improving Energy Security: Curing the Bulgarian Gas Sector's inefficiencies*, (2010) Master Thesis submitted to Central European University, Budapest < http://www.etd.ceu.hu/2010/nenova_stela.pdf > accessed 14 August 2021, 40.

Page intentionally left blank

Chapter IV:

COMPETITION LAW IN ENERGY SECTOR

1. Introductory Remarks

As it has already been pointed out, prior to the liberalization policy, energy markets used to be regulated in a conservative way, regardless of the fact whether state-owned or privately or publicly owned and an integrated energy company generally owned the production segment, the transmission, distribution, supply and retail sale of the energy to the final consumer³²⁴.

While the competition law rules functions on *ex post* and on case-by-case basis, the sector specific rules, such as those in energy policy, are more specific and have a regulatory *ex ante* roots in order to address a bunch of particular objectives³²⁵.

Of utmost importance in network-based industries like the gas one is to discourage vertically integrated undertakings (VIUs) to discriminate against market competitors in terms of access to network, relevant information and investments in networks³²⁶.

The well-functioning internal gas market will allow the market actors to bear the fruits of the competition on the market³²⁷ which, in my view, shall result in lower prices for the consumers, interconnection between MS and security of the market based on the free access and diversification of supplies.

Although competition law case-law does not address the entire natural gas sector, the competition law aims at the behavior of market incumbents which raises concerns about the compatibility of that behavior³²⁸.

Nonetheless, it is appropriate to point out that the decisional practice of the Commission has elaborated the following segmentation of the relevant product market in terms of the market of natural gas: (i) production and exploration for natural

³²⁴ David B. Spence, Can Law Manage Competitive Energy Markets, Cornell Law Review (May 2008) Volume 93, Issue No 4, Article 8, 765-818 < <https://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=3095&context=clr> > accessed 7 October 2021, 769-770.

³²⁵ Diathessopoulos, Competition Law and Sector Regulation in the European Energy Market after the Third Energy Package: Hierarchy and Efficiency (n 74), 3.

³²⁶ Demir, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market (n 26), 73.

³²⁷ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 173-174.

³²⁸ Waloszyk, Possibilities and Limitations for EU Gas Market Integration under the Third Energy Package (n 24), 195.

gas; (ii) gas wholesale supply; (iii) gas transmission (via high pressure systems); (iv) gas distribution (via low pressure systems); (v) gas storage; (vi) gas trading; (vii) gas supply to end customers; and (viii) the market for infrastructure operations for gas imports³²⁹.

Although competition law rules go hand in hand with the state aid law, the current chapter does not have the idea to give an extensive overview of the competition law influence on the energy sector but rather demonstrate the intersection between sector regulation and competition law with regard to the Bulgarian natural gas market, therefore the state aid law rules in the energy sector will not be touched upon in the current chapter.

The emphasis will be put on two specific cases, where the first one turns out to have crucial consequences on the Bulgarian gas market, namely Case AT.39816 *Upstream gas supplies in Central and Eastern Europe*, or so-called Gazprom Case and the second one alleging BEH at exploiting the national transmission grid and storage facility and capacity hoarding of Romanian Transit Pipeline 1 in order to foreclose competitors of Bulgargaz on the wholesale gas supply, namely Case AT.39849 *BEH Gas*.

2. Case AT.39816 *Upstream gas supplies in Central and Eastern Europe*

Due to the fact that this case comprises several countries from that area, emphasis will be put on the Bulgarian natural gas market.

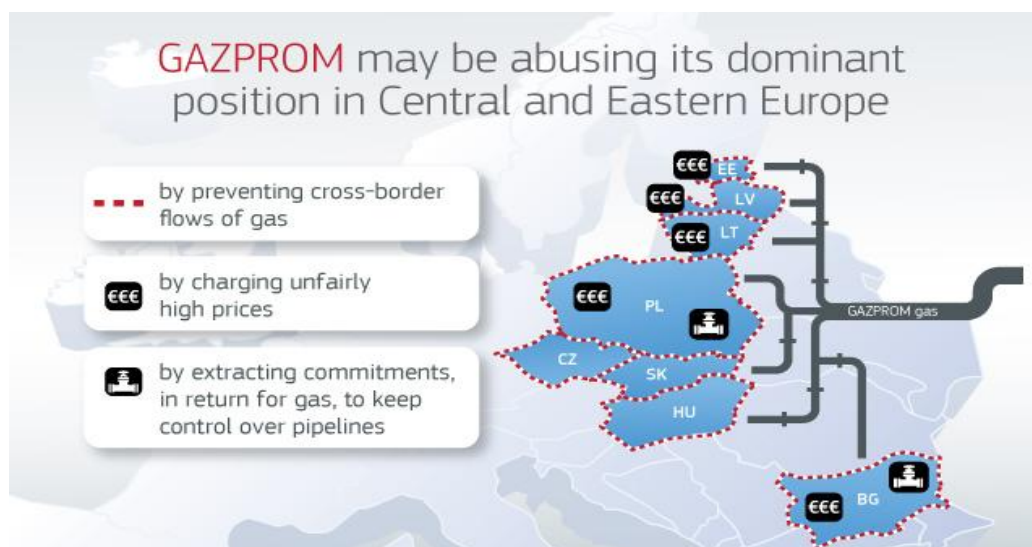
(A) Procedural backgrounds on the investigations

On 27 September 2011 the Commission carried out unannounced inspections at the premises of gas incumbents in several Member States due to its concern of potential anticompetitive practices in breach of EU law or that these particular companies possess information with regard to such practices³³⁰.

³²⁹ Commission Decision of 21.10.2009 relating to a procedure in Merger Procedure under Art. 6(1)(b) of Regulation (EC) 139/004, Case COMP/M.5649 - *RREEF FUND/ ENDESA/ UFG/ SAGGAS* (Brussels, 21.10.2009) C(2009) 8321 < https://ec.europa.eu/competition/mergers/cases/decisions/m5649_20091021_20310_en.pdf > accessed 9 January 2022, Rec. 11.

³³⁰ European Commission, Press corner, Antitrust: Commission confirms unannounced inspections in the natural gas sector MEMO/11/641 (Brussels, 27 September 2011) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_11_641 > accessed 8 October 2021.

Figure 5: Commission's concerns about Gazprom's commercial practices



Source: European Commission, Press corner, MEMO/15/4829

On 4 September 2021 the Commission announced the opening of proceedings against Gazprom presuming abuse of its dominant position in the upstream gas supply market in Central and Eastern European Member States, in breach of Art. 102 of the TFEU, which presumably may restrict competition, resulting in higher prices and deterioration of security of supply. Thus said, the Commission investigated allegedly three anti-competitive practices in CEE area, namely:

- (i) market division by hindering the free flow of gas across Member States;
- (ii) prevention of diversification of gas supply sources;
- (iii) charging unfair prices on its customers by oil-indexation linkage³³¹;

In April 2015 the Commission sent a Statement of Objections³³² to Gazprom alleging that some of its business practices in CEE gas markets constitute abuse of its dominant position taking the view that Gazprom has been hindering competition in the gas supply markets in eight Member States – Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia which resulted in:

- (i) imposed 'territorial restrictions' in its supply agreements with wholesalers and industrial customers where these restrictions have included export bans of

³³¹ European Commission, Press corner, Press release Antitrust: Commission opens proceedings against Gazprom, IP/12/937 (Brussels, 4 September 2012) <https://ec.europa.eu/commission/presscorner/detail/en/IP_12_937> accessed 8 October 2021.

³³² The Statement of Objections itself is not published by the Commission.

gas and prevention of the cross-border flow of gas by means of ‘destination clauses’ which have required gas to be used in specific territories (the customers must use the purchased gas in its own country or sell it to certain customers within its country) or refusing under certain circumstances to change the point of delivery of the gas;

(ii) those restrictions may have resulted in ‘higher gas prices and allowed Gazprom to pursue an unfair pricing policy’ in five Member States, including Bulgaria, and the prices charged have been significantly higher than Gazprom’s costs or benchmark prices; nevertheless, those unfair prices may have been due to price formulae indexed to basket of oil product prices and unduly favoured Gazprom over the customers;

(iii) leveraging of its dominant market position by making gas supplies to Bulgaria and Poland conditional on obtaining ‘unrelated commitments from wholesalers concerning gas transport infrastructure’; e.g. gas supplies have been made dependent on investments in pipeline projects promoted by Gazprom [South Stream]³³³ or accepting Gazprom reinforcing its control over a pipeline [Yamal – Europe]^{334 335};

As it can be easily seen on the Figure above, Bulgaria is among the Member States where all the alleged detriment to competition commercial practices took place.

³³³ (emphasis added – initially pipelines are not referred to in the press release) Jonathan Stern and Katja Yafimava, The EU Competition investigation of Gazprom’s sales in central and eastern Europe: a detailed analysis of the commitments and the way forward, Oxford Institute for Energy Studies, July 2017, OIES Paper: NG 121 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2017/07/The-EU-Competition-investigation-of-Gazproms-sales-in-central-and-eastern-Europe-a-detailed-analysis-of-the-commitments-and-the-way-forward-NG-121.pdf> > accessed 29 July 2021, 3.

³³⁴ European Commission, Press Corner, Press release, Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets, IP/15/4828 (Brussels, 22 April 2015) < https://ec.europa.eu/commission/presscorner/detail/en/IP_15_4828 > accessed 8 October 2021; European Commission, Press corner, Antitrust: Commission sends Statement of Objections to Gazprom - Factsheet, MEMO/15/4829 (Brussels, 22 April 2015) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_15_4829 > accessed 8 October 2021.

³³⁵ (emphasis added – initially pipelines are not referred to in the press release) Stern and Yafimava, The EU Competition investigation of Gazprom’s sales in central and eastern Europe: a detailed analysis of the commitments and the way forward (n 333), 3.

(B) Gazprom's Commitments Proposal

Figure 6: Gazprom's proposed remedies to the competition concerns raised by the Commission



Source: European Commission, Press Release, IP/17/555

In March 2017 the Commission published the Proposed Commitments of Gazprom³³⁶ which addressed the concerns raised by the Commission. The content of these initial commitments is almost identical to the Final Commitments³³⁷.

With regard to Bulgaria the main concerns of the Commission were the isolation of Bulgarian gas market from Gazprom and excessively high prices charged in Bulgaria compared to Western European benchmarks, especially liquid gas. Being the dominant player on the Bulgaria upstream wholesale gas market, the isolation has been due to some extent to the territorial restrictions and the lack of free flow of gas across Bulgarian borders and lack of infrastructure access and lack of interconnection. However, the gas prices in Bulgaria after the initiation of the proceeding have decreased due to fall in oil prices and in these years the interconnector between Greece and Bulgaria appeared on the agenda³³⁸.

³³⁶ Proposal for Commitments under Art. 9 of Council Regulation No 1/2003 in Case COMP/39.816 by Gazprom (14 February 2017), Non-confidential Version, Proposal Commitments < https://ec.europa.eu/competition/antitrust/cases/g2/gazprom_commitments.pdf > accessed 8 October 2021

³³⁷ Proposal for Commitments under Art. 9 of Council Regulation No 1/2003 in Case COMP/39.816 by Gazprom (15 March 2018), Non-confidential Version, Final Commitments < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39816/39816_9994_3.pdf > accessed 8 October 2021

³³⁸ European Commission, Press corner, MEMO/17/546, Fact Sheet – Bulgaria (Brussels, 13 March 2017) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_17_546 > accessed 9 October 2021

As noted by the Commission, Gazprom's commitment provided a framework to tackle the concerns raised:

- (i) ensuring competitive prices by means of renegotiation of gas prices including the prices at competitive gas hub prices in order to ensure closer linkage to the prices in Western Europe where sources of gas are available and prices are competitive; more frequent price revision is also in the commitments;
- (ii) Gazprom waives to seek damages from its Bulgarian partners following the termination of the South Stream project³³⁹.
- (iii) removal of market segmentation clauses which would enable the free flow of gas through export and import to/from other EU gas markets without any contractual restrictions prescribed;
- (iv) changes in the contractual clauses regarding the monitoring and metering of gas in Bulgaria and putting the Bulgarian TSO in control of the cross-border flow of gas and thus facilitate interconnection agreements with other EU MSs;
- (v) since lack of access to infrastructure, the commitments will enable gas to be brought under swap-like operations^{340 341};

(C) The obligations imposed on Gazprom

On 24 May 2018 the Commission adopted a decision³⁴² imposing on Gazprom a set of obligations to address the concerns raised by the Commission.

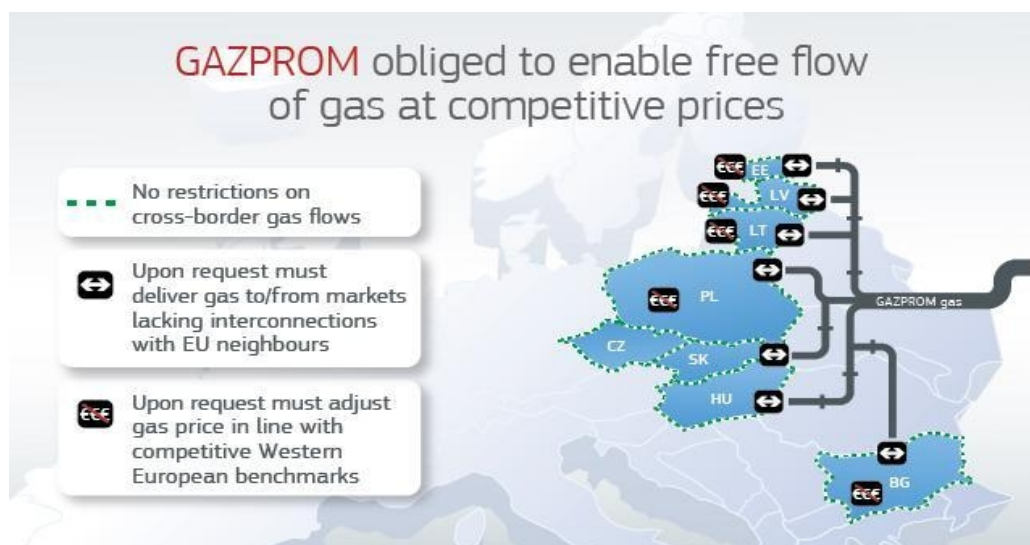
³³⁹ See further: Bulgarian Energy Holding, Projects, South Stream < <https://bgenh.com/en/page/44/South-Stream.html> > accessed 9 October 2021.

³⁴⁰ European Commission, Press corner, MEMO/17/546, Fact Sheet – Bulgaria (Brussels, 13 March 2017) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_17_546 > accessed 9 October 2021.

³⁴¹ For swap deals see further e.g. Investopedia, Commodity Swap < <https://www.investopedia.com/terms/c/commodityswap.asp> > accessed 9 October 2021.

³⁴² Commission Decision of 24.5.2018 under Art. 9 Regulation (EC) No 1/2003 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union (TFEU) and Article 54 of the EEA Agreement, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe*, C(2018) 3106 final (Brussels, 24.5.2018) Public version < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39816/39816_10148_3.pdf > accessed 9 October 2021.

Figure 7: Obligations imposed on Gazprom



Source: European Commission, Press Release, IP/ 18/3921

A set of obligations in place for eight years addressed the issues below:

(i) removal of all contractual barriers to free flow of gas; furthermore, with regard to Bulgaria adaptation concerning the monitoring and metering of gas in Bulgaria and transferring the control of the gas transmission infrastructure to the Bulgarian TSO³⁴³ and probably more important removing obstacles to the conclusion of agreements at the interconnection point between Bulgaria and other EU Member States;

Thus, Gazprom is obliged to remove obstacles for Bulgartransgaz to conclude interconnection agreements at the interconnection points between Bulgaria and other EU member states, and to adjust the current 'allocation-as-measured' methodology to the 'allocation-as-nominated' methodology³⁴⁴.

(ii) steps to the integration of the gas markets in the CEE area; since free flow of gas requires interconnectors and infrastructure connecting Bulgaria, Estonia, Latvia and Lithuania was not sufficient at that time and Gazprom gave the opportunity to deliver gas to and from those countries by means of swap deals under fixed and transparent fees charged by Gazprom and for small gas

³⁴³ European Commission, Press release, Antitrust: Commission imposes binding obligations on Gazprom to enable free flow of gas at competitive prices in Central and Eastern European gas markets, IP/18/3921 (Brussels, 24 May 2018) < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_3921 > accessed 9 October 2021.

³⁴⁴ Proposal for Commitments in Case COMP/39.816 by Gazprom (15 March 2018), Final Commitments (n 337), 4, Section II.1.1. 7a.

quantities (50 mcm) and at notice of four months where Gazprom can refuse only on grounds of lack of transmission capacity³⁴⁵;

Hereafter, Gazprom is obliged for a fee paid to enable a customer to request for a swap of delivery locations for part or all of the contracted gas volume, namely (i) from original delivery point in Slovakia (Velke Kapusany) to the new delivery point in Bulgaria (Negru Voda) or *vice versa* in the viewpoint of Bulgaria respectively and (ii) from the original point in Hungary (Beregovo) to Bulgaria (Negru Voda) and *vice versa* in the viewpoint of Bulgaria respectively³⁴⁶.

(iii) regarding the higher prices charged, Bulgaria was enabled to ask for price revision if the price diverges from competitive Western European benchmarks immediately after the decision and every two years; the new price shall reflect competitive Continental Western European price benchmarks, including prices at the most relevant liquid gas hubs in Continental Europe, namely TTF in the Netherlands and NCG in Germany and the new lower prices shall be applied retroactively from the date of the request; referral to arbitration is prescribed also where the new price is not agreed upon within 120 days; that option shall avoid the divergence based on oil-indexed gas prices and applies to contracts with duration of three years or more³⁴⁷;

Gazprom was obliged to propose/amend the price clause in the contracts with its customers in a way where to reflect the development of the European gas markets, i.a. the development of the average weighted import border prices in Germany France and Italy and/or the development of the prices at the relevant generally accepted liquid gas hubs in Continental Europe³⁴⁸.

(iv) removing the demands obtained by leveraging the market position with regard to South Stream project and no damages are to be sought from the Bulgarian partners³⁴⁹.

³⁴⁵ European Commission, Antitrust: Commission imposes binding obligations on Gazprom to enable free flow of gas at competitive prices in Central and Eastern European gas markets (n 343).

³⁴⁶ Proposal for Commitments in Case COMP/39.816 by Gazprom (15 March 2018), Final Commitments (n 337), 15, Section II 2(i), Para. (19).

³⁴⁷ European Commission, Antitrust: Commission imposes binding obligations on Gazprom to enable free flow of gas at competitive prices in Central and Eastern European gas markets (n 343).

³⁴⁸ Proposal for Commitments in Case COMP/39.816 by Gazprom (15 March 2018), Final Commitments (n 337), 15, Section II 1.2., Para. (15);

³⁴⁹ European Commission, Antitrust: Commission imposes binding obligations on Gazprom to enable free flow of gas at competitive prices in Central and Eastern European gas markets (n 343).

Gazprom confirmed that the Bulgarian part of South Stream is terminated and no damages will be sought³⁵⁰.

(D) Rationale and principles behind the Commission's concerns

1. Territorial restrictions preventing the free flow of gas

With regard to territorial restrictions and market partitioning in Bulgaria, the Commission held that³⁵¹ the gas supply contract contained requirement that Gazprom shall agree on the use of certain gas metering points each time gas was to be exported from Bulgaria where these gas metering requirements may have prevented the export since at the gas metering the protocols for delivered and off-taken gas quantities under the contract had to be signed by both Gazprom and the customers so that compliance with contract in terms of off-taken gas is demonstrated. Moreover, depending where the gas stays in Bulgaria or is exported, the metering points changed and without Gazprom's consent on the use of the metering points where the exported gas can be metered the customer was unable to document to Gazprom the fulfilment of the off-take obligations and therefore Gazprom stayed *de facto* in control of the gas flows and may have prevented the export³⁵².

The Commission should have been concerned that the monitoring and metering provisions in Gazprom's contract with its Bulgarian counterpart had resulted in isolation of the Bulgarian gas market from those of its neighbouring Member States. Moreover, it shall be understood that Bulgartransgaz (Bulgarian only TSO) has been prevented from building interconnection with the neighbouring EU countries in line with Regulation (EC) 2015/703^{353 354}.

³⁵⁰ Proposal for Commitments in Case COMP/39.816 by Gazprom (15 March 2018), Final Commitments (n 337), 15, Section II 3, Para 21 and 21.

³⁵¹ Commission Decision of 24.5.2018, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe* (n 342), Para. 58.

³⁵² *ibid.*

³⁵³ Stern and Yafimava, *The EU Competition investigation of Gazprom's sales in central and eastern Europe: a detailed analysis of the commitments and the way forward* (n 333), 6.

³⁵⁴ Commission Regulation (EU) 2015/703 of 30 April 2015 establishing a network code on interoperability and data exchange rules, C/2015/2823, OJ L 113, 1.5.2015, 13-26; for interoperability see further European Network of Transmission System Operators for Gas (ENTSO-G), *Network Codes and Guidelines, Interoperability and Data Exchange NC* < <https://www.entsog.eu/interoperability-and-data-exchange-nc> > accessed 9 October 2021.

Furthermore, facilitating potential interconnection agreements at the Greek-Bulgarian Border would enable the reverse flows from Greece to Bulgaria and provide alternative source of gas to enter the Bulgarian gas market³⁵⁵.

Thus said, these agreements will allow swap and virtual reverse flow operations to be carried out and thus gas destined for Greece could stay in Bulgaria while Greece can satisfy its demand in Greece with LNG which has the same result as supplying LNG to Bulgaria. Nevertheless, these virtual backhaul and swap operations could alone limit Gazprom's market power regardless the ones considered below³⁵⁶.

2. Swap-like options

With regard to the swap-like obligations from Gazprom's side, Bulgargaz (the public supplier in Bulgaria) can have the gas destined for Bulgaria part or all of it to be delivered on another market – Slovakia or Hungary and hence, Gazprom can facilitate the integration of markets not directly linked by gas infrastructure³⁵⁷.

In particular, these swap deals can be seen as a tool to equalize the price of the Russian gas in the CEE markets since these deals allow competition between Gazprom's customers and thus it could tackle Gazprom's unfair pricing policy³⁵⁸.

Nevertheless, due to the lack of interconnection, these swap deals increase only the 'contractual diversification'³⁵⁹ while the gas entering Bulgarian markets remained 100 percent Russian until 2019.

3. Gas price

With regard to the pricing, the Commission noted that these obligations ensure that Gazprom's customers get competitive price and protect them from future increase in the price of oil³⁶⁰. Furthermore, in case of fall of oil prices, oil-indexed gas prices are in

³⁵⁵ Commission Decision of 24.5.2018, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe* (n 342), para 169.

³⁵⁶ Chi Kong Chyong, *An Assessment of Gazprom's Proposed Commitments Concerning Central and Eastern European Gas Markets Using a Global Gas Market Simulation Model*, Energy Policy Research Group, University of Cambridge, May 2017, Comments to the European Commission, Directorate General for Competition in response to the antitrust case AT.39816 — *Upstream gas supplies in central and eastern Europe* < https://www.eprg.group.cam.ac.uk/wp-content/uploads/2017/05/An-Assessment-of-Gazproms-commitments_CHYONG.pdf > accessed 30 July 2021, 14, Para. 45 and 46.

³⁵⁷ *ibid*, 8, Para. 20.

³⁵⁸ *ibid*, 9, Para. 22.

³⁵⁹ *ibid*, 11, Para. 34.

³⁶⁰ Commission Decision of 24.5.2018, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe* (n 342), para 164.

line with the competitive Western European price benchmarks³⁶¹ and thus the obligations imposed on Gazprom seem to protect the prices from becoming unfair again hand in hand with oil prices increase³⁶².

It can be argued that the concerns raised by the Commission with regard to pricing are applicable to countries which are entirely dependent on Russian gas and have no other alternatives but to buy from Gazprom, the latter may be exploiting its dominant position refusing to sell on other than oil-indexed price³⁶³.

Thus said, e.g. Bulgaria shall be able to buy Russian gas at prices reflecting generally accepted liquidity hubs which would not be offered due to the lack of interconnections with neighbouring countries³⁶⁴.

With regard to the gas price for the Bulgarian customer of Gazprom, by means of the swap deals Gazprom's dominant position is mitigated and the wholesale day-ahead prices in Bulgaria were close to those in North-Western European markets³⁶⁵.

4. Infrastructure concerns

The Commission held that by conditioning the supply of gas and prices on unrelated infrastructure commitments in Bulgaria Gazprom should have gained benefits that could not attain where competitive market for supply segment functioned in Bulgaria³⁶⁶. Furthermore, conditioning the supply of gas and the gas prices in Bulgaria upon commitment to participate in South Stream project could have constituted tying scenario³⁶⁷. As observed by the Commission Art. 102, p. (d) TFEU prescribes that where the dominant undertaking forces the customer to accept other types of distinct 'supplementary obligation' or commitments in order to obtain the benefit with respect to which the supplier is dominant³⁶⁸.

³⁶¹ *ibid*, para 175.

³⁶² *ibid*, para 176.

³⁶³ Stern and Yafimava, *The EU Competition investigation of Gazprom's sales in central and eastern Europe: a detailed analysis of the commitments and the way forward* (n 333), 20.

³⁶⁴ *ibid*, 31.

³⁶⁵ Chyong, *An Assessment of Gazprom's Proposed Commitments Concerning Central and Eastern European Gas Markets Using a Global Gas Market Simulation Model* (n 356), 9, Para. 23, in conjunction with 26, Annex 3, Figure A6.

³⁶⁶ Commission Decision of 24.5.2018, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe* (n 342), para 180.

³⁶⁷ Jones, *EU Energy Law Volume II: EU Competition Law and Energy Markets* (n 72), 332.

³⁶⁸ Commission Decision of 24.5.2018, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe* (n 342), para 82.

(E) Implications on the Bulgarian market

(i) In terms of pricing, that commitment of Gazprom has had huge impact on Bulgarian gas market. In compliance with the Commission Decision, on 2nd March 2020 Bulgargaz signed Annex with Gazprom export to their contract and thus, managed to renegotiate the contract with Gazprom regarding the price and price is currently based on a hybrid formula, where part of the prices is oil-indexed and part of it is based on liquid hubs in Western Europe and the percentage between those components and the hub to which the prices is indexed are considered trade secret³⁶⁹.

With respect to the retroactive application of the revised price in accordance with the Commission Decision, legislative amendments and supplementation were carried out so that to allow Bulgargaz to reimburse the amounts (approximately BGN 202 million³⁷⁰) under gas supply contracts to the end suppliers and customers connected to the gas transmission network, including entities that have been granted a license for production and transmission of heating energy. Moreover, EWRC adopted decision for approving the public provider's natural gas selling price for each month from 5 August 2019 to 31 December 2019 and from January 2020 to 31 March 2020 the prices at which end suppliers sell to customers connected to the respective gas distribution networks³⁷¹. Thus, these amendments of the Energy Act and retroactively price approval by the EWRC were aimed at transferring the benefits of the price revision to the end consumers at the end of the day.

Moreover, the new price indexation would enable Bulgargaz to respond to the price fluctuations and therefore in conjunctions with the price regulation by EWRC, shall protect the end customers.

(ii) With regard to territorial restrictions imposed by Gazprom, the Commission Decision played decisive role with respect to the Bulgarian part of the South Stream project. Due to the commitments imposed on Gazprom, the project was abolished.

The South Stream project has been presented by the politicians as a new route for Russian gas supply through Bulgaria, Serbia, Hungary and Austria and at the same

³⁶⁹ However, some publication in the media claim the 70% of the price is indexed to TTF hub in Netherlands, while the other 30% are indexed to the oil prices.

³⁷⁰ Bulgargaz, News, Press release (01.09.2021) < <https://www.bulgargaz.bg/en/news/336> > accessed 15 October 2021.

³⁷¹ EWRC, Annual Report to the European Commission, July 2021 (n 256), 8.

time fulfilling the goal of security of supply through diversification and delivering 63 bcm natural gas to Europe³⁷².

Moreover, the project has been criticized for its non-compliance with the EU law, namely: (i) with respect to the ownership 'unbundling' Gazprom cannot act as a producer and a supplier of gas and at the same time operate the transmission network as well since in Bulgaria the South Stream project was a joint venture between BEH and Gazprom; and (ii) non-discriminatory access of third parties to the pipeline was in jeopardy if Gazprom exercises an exclusive right to be the sole supplier³⁷³.

(iii) With regard to the free flow of gas enhance due to Gazprom's commitments, Bulgargaz has been enabled to have the Azeri gas delivered based on contractual reverse flow. Alongside with the negotiated pricing mechanism, that commitment has had crucial impact on the market taking into account that Bulgargaz is the dominant player on the wholesale market.

Therefore, that case has positive effect in a way that Bulgaria will not invest in a project that would only diversify the route of the Russian gas to Bulgaria but at the same time would not tackle the dependence on Russian gas.

3. Case AT.39849 BEH gas

(A) Procedural backgrounds

On 5 July 2013 the Commission announced that it has opened formal investigations against Bulgarian Energy Holding (BEH) and its subsidiaries Bulgargaz and Bulgartransgaz (altogether referred to as BEH Group) which might have been hindering competitors from accessing key infrastructure and thus breaching EU law by abusing their dominant market position. The Commission had concerns that BEH Group may have been preventing (i) potential competitors from accessing the Bulgarian gas transmission network (ii) and the gas storage facility by explicitly or tacitly refusing or delaying access to third parties and (iii) preventing competitors from accessing the main gas import pipeline by reserving capacity that is consistently not used, without releasing it on the market. Thus, without that particular access, it is

³⁷² Center for the Study of Democracy, Good Governance and Energy Security in Bulgaria, Policy Tracker: EU and Russia's Energy Policy at the Backdrop of the South Stream Pipeline (2014) < <https://www.cceol.com/search/gray-literature-detail?id=510998> > accessed 2 December 2021, 5.

³⁷³ Ruslan Stefanov, Martin Vladimirov, Bulgaria and the South Stream Pipeline Project At the Crossroads of Energy Security and State Capture Risks, Südosteuropa Mitteilungen (Volume 54, Issue 05-06, 2014), 54-71 < <https://www.cceol.com/search/article-detail?id=420908> > accessed 2 December 2021, 64-65.

impossible for any companies to compete with Bulgargaz on the Bulgarian gas supply markets³⁷⁴.

(B) Prohibition Decision

On 17 December 2018 the Commission adopted its extensive and thorough prohibition decision³⁷⁵ where it expressed its finding that BEH Group should have infringed Art. 102 of the TFEU by refusing third party access to the Bulgarian transmission network, the Romanian Transit Pipeline 1 and UGS Chiren resulting in foreclosure of the gas supply markets in Bulgaria.

In general, BEH Group should have abused its dominant positions by foreclosing entry into the gas supply markets in Bulgaria by unduly restricting access to the infrastructure it owned and operated. Between 2010 and 2015, the BEH Group should have blocked the access to the following gas infrastructure:

(i) the domestic Bulgarian gas transmission network by refusals (or, in some cases, at least undue delays) to give third party access to the Bulgarian transmission network;

(ii) the only gas storage facility in Bulgaria by refusals (or, in some cases, at least undue delays) to give third party access to storage;

(iii) the only import pipeline bringing gas into Bulgaria, which was fully booked by BEH – capacity hoarding on the Romanian Transit Pipeline 1³⁷⁶.

Without access to these essential infrastructures, it was impossible for potential competitors to enter wholesale gas supply markets in Bulgaria. This prevented any development of competition and ensured a near monopoly for Bulgargaz. The Commission has alleged BEH in using its dominant position of one subsidiary, Bulgartransgaz, to protect the near monopolistic position of its other subsidiary, Bulgargaz, on supplying gas. Moreover, Bulgargaz should have hoarded capacity on

³⁷⁴ European Commission, Press corner, Press release, Antitrust: Commission opens proceedings against Bulgarian Energy Holding and its subsidiaries Bulgargaz and Bulgartransgaz, IP/13/656 (5 July 2013) < https://ec.europa.eu/commission/presscorner/detail/en/IP_13_656 > accessed 5 December 2021.

³⁷⁵ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59).

³⁷⁶ European Commission, Press corner, Press release Antitrust: Commission fines BEH Group € 77 million for blocking access to key natural gas infrastructure in Bulgaria, IP/18/6846 (Brussels, 17 December 2018) < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_6846 > accessed 5 December 2021; Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 450.

the only import pipeline bringing gas through Romania to Bulgaria and therefore blocking usage from potential competitors³⁷⁷.

1. Refusal of access to transmission network and storage facility

The Commission has seen in Bulgartransgaz' behavior a pattern to prevent or attempt to prevent third party access to the Bulgarian transmission network by:

(a) failing to act in a transparent manner and to reply to access requests, for example taking several years to process requests made by third parties;

(b) making unreasonable requests with regard to access, for example imposing supplementary conditions without any obvious reason or link to the request as such; and

(c) justifying its failure to grant access based on a deliberate misinterpretation of information or on incorrect requirements³⁷⁸.

On the other hand, Bulgargaz has been subject to a far more lenient approach and enjoyed exclusive access to the Bulgarian transmission network where applications for access were processed without any delays, without signed contracts, and at times Bulgartransgaz even took the initiative to renew Bulgargaz' access to the network³⁷⁹.

These three practices pointed out above mutually reinforced each other and formed part of a single infringement³⁸⁰.

The Commission found clear pattern in Bulgartransgaz' behaviour to prevent or attempt to prevent third party access to the Chiren storage facility, namely³⁸¹:

(i) non-transparent manner and thus creating difficulties for third parties to apply for access to storage;

(ii) failing to reply to access requests or failing to process the requests internally;

³⁷⁷ European Commission, Antitrust: Commission fines BEH Group € 77 million for blocking access to key natural gas infrastructure in Bulgaria (n 376).

³⁷⁸ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 95.

³⁷⁹ *ibid*, Rec. 96.

³⁸⁰ *ibid*, Rec. 451.

³⁸¹ *ibid*, Rec. 178.

(iii) overburdening third parties that requested access with requests to supply an unreasonable amount of data or to re-submit access requests on the basis of a deliberate misinterpretation of information;

(iv) devising storage allocation rules in such a way that in all likelihood Bulgargaz would obtain by far the largest share of available storage capacity.

Similar to the transmission network access, Bulgargaz received far more lenient approach and thus has continuously obtained access to storage where its applications were processed without any delays and Bulgartransgaz frequently granted access even without a signed contract³⁸².

Moreover, the Commission has taken into account that the BEH group is involved in the gas sector in Bulgaria through its subsidiaries Bulgargaz and Bulgartransgaz, where the former is the main supplier of gas at wholesale level and to final customers connected directly to the Bulgarian transmission network and the latter is the only TSO in Bulgaria and operates the Bulgarian transmission network and underground gas storage facility³⁸³.

It is important to note that the Commission acknowledged that BEH forms a single economic unit in which it determined the strategy undertaken by the group for the investigated period. The holding company has exercised decisive influence over its subsidiaries including over individual actions of the BEH subsidiaries that could influence the group's strategy as a whole³⁸⁴ and BEH has directly participated in the access refusals and the capacity hoarding on the relevant gas infrastructure controlled by the BEH group³⁸⁵.

The Case demonstrated that the BEH group retained a quasi-monopolistic position on the gas supply markets in Bulgaria and until 1 January 2015 protected the *status quo* by preventing, restricting and delaying the development of effective competition³⁸⁶.

BEH's group behavior has consisted in preventing, restricting and delaying access to the Bulgarian transmission network, as well as to Chiren storage facility, the only one in Bulgaria³⁸⁷.

³⁸² *ibid*, Rec. 179.

³⁸³ *ibid*, Rec. 362.

³⁸⁴ *ibid*, Rec. 365.

³⁸⁵ *ibid*, Rec. 393.

³⁸⁶ *ibid*, Rec. 451.

³⁸⁷ *ibid*, Rec. 468.

Clearly, several market players have expressed a strong interest in accessing the infrastructure owned or controlled by the BEH group, but were prevented from doing so as a result of the BEH group's strategy to protect its supply arm's Bulgargaz position on the Bulgarian gas market³⁸⁸ and thus, has deprived third parties from obtaining access to a source of flexibility that would have allowed them to compete on equal terms with Bulgargaz on the gas supply markets in Bulgaria since underground storage facilities are essential for any gas supplier to be active on the gas wholesale and retail markets, so as to optimally manage the (*inter alia* seasonal) fluctuations in customer demand³⁸⁹.

2. Capacity hoarding

In my view, the aspect of case to make it outlined is the capacity hoarding by Bulgargaz which is not a such typical and easily evident third-party access infringement compared to the two others pointed out above.

Although the regulatory framework of the Union does not impose an obligation on a shipper such as Bulgargaz to grant third-party access to the capacity it holds on a transmission pipeline, the Commission, in line with the applicable case law elaborated thoroughly the indispensable nature for the Bulgarian gas market of the Romanian Transit Pipeline 1³⁹⁰. Therefore, the Commission argues that by fully blocking third party access, Bulgargaz had for many years enjoyed the almost total absence of competition on the downstream wholesale gas supply market in Bulgaria and on the market for the retail supply of gas to large end customers directly connected to the Bulgarian transmission network³⁹¹.

Nevertheless, at least until April 2016 there was no alternative infrastructure than Romanian Transit Pipeline 1 that Bulgargaz' competitors could use for bringing gas into Bulgaria³⁹². That pipeline is considered indispensable by the Commission since gas import infrastructure is an essential facility as it was not commercially viable to duplicate that infrastructure³⁹³ and since Bulgargaz' usage has not exceeded 65 % of

³⁸⁸ *ibid*, Rec. 470.

³⁸⁹ *ibid*, Rec. 491.

³⁹⁰ *ibid*, Rec. 532, 549.

³⁹¹ *ibid*, Rec. 533.

³⁹² *ibid*, Rec. 555.

³⁹³ *ibid*, Rec. 556.

the total daily capacity of the Romanian Transit Pipeline, clearly it has not been viable to invest into additional infrastructure if the existing one is running half-empty³⁹⁴.

According to the Commission, Bulgargaz' capacity hoarding of the Romanian Transit Pipeline 1 amounts to a refusal to supply, where its consistent behaviour in refusing access comprised of:

- (a) 100% total capacity reservation of the Romanian Import Pipeline 1 for the period 2005-2015 when Bulgargaz used only a part of the total available capacity when peak usage did not exceed 65% of total daily capacity during the period 2007-2016;
- (b) not agreeing to return the capacity when requested by Transgaz or imposing conditions before the capacity was returned;
- (c) not replying to individual access request³⁹⁵;

Moreover, the Commission has noted that although Bulgargaz paid a fixed monthly fee for the use of the Romanian Transit Pipeline 1 to Transgaz irrespective of the volume of gas actually transmitted it has not taken benefit to grant secondary capacity access to interested third parties in order not only to recover some of the fixed usage fee³⁹⁶ but also to gain additional benefits. To the contrary, Bulgargaz has had limited incentives to release unused capacity towards its third party competitors due to the *de facto* absent competition in the segment it has been acting.

BEH's conduct in question is presumed to have prevented the development of effective competition on the gas supply markets in Bulgaria. That behavior has made it difficult or even impossible for potential competitors to enter into the downstream wholesale gas supply market in Bulgaria and on the market for the retail supply of gas to large end customers directly connected to the Bulgarian transmission network. Otherwise, suppliers other than Bulgargaz may have entered the market and thus introducing competition and choice to the benefit of Bulgarian consumers³⁹⁷.

3. Concluding observations

Each of the three practices pointed out above should have had the ability to foreclose the competitors on the downstream wholesale gas supply market in Bulgaria and on

³⁹⁴ *ibid*, Rec. 557.

³⁹⁵ *ibid*, Rec. 534, 537.

³⁹⁶ *ibid*, Rec. 547.

³⁹⁷ *ibid*, Rec. 550.

the market for the retail supply of gas to large end customers directly connected to the Bulgarian transmission network. While Bulgartransgaz should have prevented, restricted and delayed third party access to the benefit of Bulgargaz, Bulgargaz should have had the ability to foreclose its competitors on the gas supply markets in Bulgaria by hoarding capacity of the Romanian Transit Pipeline 1³⁹⁸.

Moreover, these practices have complemented and mutually reinforced each other and were implemented with the presumed single aim of foreclosing the gas supply markets in Bulgaria. According to the Commission, the practices were explicitly interlinked so that to influence the practices of BEH, Bulgargaz and Bulgartransgaz and together they contributed to preventing, restricting and delaying third party access to the infrastructure owned or controlled by the BEH group³⁹⁹.

However, the case is still pending since in line with a decision of the National Assembly of 24.11.2017, BEH Group has been obliged to carry out the necessary actions with respect to the case⁴⁰⁰ and on 28.02.2019, BEH, Bulgartransgaz and Bulgargaz have appealed the decision before the General Court of the European Union⁴⁰¹.

Therefore, the case demonstrates the deficiencies of national market and moreover, the integration of the sector segments embodied in BEH. Moreover, during part of the investigated period BEH and its both subsidiaries have shared the same physical premise and IT system⁴⁰² and as it was considered that where ITO remains part of the VIU, concerns are raised reasonably and presumably Bulgargaz has been treated preferentially than its competitors from Bulgartransgaz and presumably sensitive information has been exchanged between Bulgargaz and Bulgartransgaz in terms of access to the network and storage. Moreover, since Bulgartransgaz has been already

³⁹⁸ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 611.

³⁹⁹ *ibid*, Rec. 612.

⁴⁰⁰ Решение за предприемане необходимите действия за приключване на дело COMP/B1/AT.39849 - БЕХ ГАЗ, прието на 24.11.2017 от Народно Събрание, обнародвано в ДВ, бр. 95/2017 г. /Decision regarding undertaking the necessary actions for conclusion of Case COMP/B1/AT.39849 – *BEH GAS*, adopted on 24.11.2017 from the National Assembly, publ. State Gazette 95/2017/ *available only in Bulgarian*.

⁴⁰¹ Bulgartransgaz, News, Information from Bulgartransgaz EAD on the Decision of the European Commission under Case AT. 39849 *BEH-Gas* < <https://www.bulgartransgaz.bg/en/news/information-from-bulgartransgaz-ead-on-the-decision-of-the-european-commission-under-case-at-39849-beh-gas-451.html> > accessed 6 December 2021.

⁴⁰² Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 38.

certified as an ITO, the problem with the premises and IT systems have been solved no later than 2015.

4. Concluding remarks

The liberalization process in Bulgarian energy sector has been undergoing a hard path. Therefore, alongside with the regulatory framework, the Commission's most powerful tool – competition law, has pointed out the deficiencies of the national market. While the Gazprom Case influenced the market in a positive way in terms of price indexation following the trends of the liquid markets and allowing at least contractual interconnection with the neighboring Member State, the *BEH Gas* Case displayed the deficiency of the integrated company with respect to preventing the competition on the wholesale market by different types of practices where the capacity hoarding is an unusual way to secure a dominant position in a given market.

Although usually the competition case-law does not address a whole gas sector, in terms of Bulgaria, the case may differ. When the sector specific rules of the energy sector do not achieve the results aimed at, the competition rules are a valuable reserve for the Commission to avail of and directly deal with certain problems arisen⁴⁰³. Moreover, the liberalization policy aims to achieve competition law objective and goals at the heart of its rationale as it can be deduced from the specific liberalization legislation⁴⁰⁴.

Being a small market, the direction of natural gas sector is set by BEH and moreover dominated by Bulgargaz and Bulgartransgaz respectively in supply and transmission and storage. Thus, the cases pointed out above on one hand have positive impact on the whole market in terms of liquid pricing model while on the other, reveal how the transmission grid and storage facility could have been exploited to prevent competition on the wholesale level.

With respect to the *BEH Gas* Case, the competition rules applied to the case depend on and reflect the rate of efficiency of the sector specific rules in that particular case with respect to the inadequacies of their implementation into the national law⁴⁰⁵.

⁴⁰³ Diathessopoulos, *Competition Law and Sector Regulation in the European Energy Market after the Third Energy Package: Hierarchy and Efficiency* (n 74), 92.

⁴⁰⁴ *ibid*, 96.

⁴⁰⁵ *ibid*, 96,97.

Although in general, companies have the right to exploit assets and facilities in the way they find it profitable and the refusal to deal with others is not *per se* abusive in light of competition law⁴⁰⁶. However, the refusal of access could be abusive on a case-by-case basis when the access is indispensable for operating on a neighbouring market, the refusal excludes effective competition on that neighbouring market and the refusal is not objectively justified and harms consumers⁴⁰⁷ and therefore the competition law aims to pursue the objective of fair competition in a short-term view⁴⁰⁸.

With regard to the abovesaid, the *BEH Gas Case* resembles the *AT.39402 RWE gas foreclosure Case*. Similar to the findings of the Commission in *RWE gas foreclosure*⁴⁰⁹, the only Bulgarian TSO Bulgartransgaz holds monopoly over the transmission and transit networks and over the only storage facility in Bulgaria and moreover, they constitute natural monopoly.

The *BEH Gas Case* illustrates, similar to the *RWE Case*, the competition problems that can arise in the case of vertical integration between network operators and dominant supply companies, and moreover, displayed certain problems inherited from the pre-liberalization period and characterized national energy monopolists. Moreover, the vertical integration of import and supply and transmission activities embodied in BEH were found to favour their own supply business and foreclose the market. Moreover, the case displayed the difficulties for the state-owned vertical integrated undertaking BEH to ‘reconcile the diverging obligations to offer non-discriminatory access to competitors’ to abide by the unbundling rules and to maximize profits for BEH⁴¹⁰.

Moreover, the *Gazprom case*, on the other hand, influenced the national market in another aspect. Bulgargaz is the biggest natural gas trader and as already found out in the previous chapter it holds dominant position in the wholesale supply market at national level. Thus, with its role of public supplier and the natural gas price

⁴⁰⁶ *ibid*, 9.

⁴⁰⁷ *ibid*, 10.

⁴⁰⁸ *ibid*, 97.

⁴⁰⁹ Commission Decision of 18.03.2009 relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement, Case COMP/39.402 – *RWE Gas Foreclosure* (Brussels, 18.03.2009) < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39402/39402_576_1.pdf > accessed 28 December 2021, Rec. 18.

⁴¹⁰ Oliver Koch, Karoly Nagy, Ingrida Pucinskaite-Kubik and Walter Tretton, The RWE gas foreclosure case: Another energy network divestiture to address foreclosure concerns, *Competition Policy Newsletter* (2009, Number 2, European Commission) 32 – 34 < https://ec.europa.eu/competition/publications/cpn/cpn2009_2.pdf > accessed 2 January 2022, 34.

regulation by the EWRC, Bulgargaz has crucial role for the market of natural gas in Bulgaria. Hence, the price renegotiation has been criticized in the public since at 01.01.2021 the regulated natural gas price has been under EUR 14/MWh⁴¹¹, while on 01.01.2022 the regulated natural gas price has been around EUR 68/MWh (while in Western Europe the price was over EUR 113/MWh)⁴¹², which constitutes an increase of almost 5 times on annual base. Thus, Bulgargaz, as a public supplier and dominant gas trader has the potential to influence the market for natural gas at national level and therefore the Gazprom case has important consequences in order to ensure that the price Bulgargaz is charged reflects the liquid markets in Western Europe. Henceforth, the public supplier manages its import portfolio so that to ensure that the regulated price is under the average price in Western Europe and thus, allocate the benefits to its customers being distribution companies or heating companies.

Since high energy prices were one of the reasons that triggered the sector inquiry, the Commission have adopted the Third Energy Package with the aim to fight the causes for these high prices, such as market concentration, insufficiently liquid wholesale markets, insufficient market integration and foreclosed access to customers⁴¹³.

Thus said, although by means of regulated prices, the public supplier manages to fight high prices for gas despite it concentrates the main part of the wholesale segment of the gas sector.

⁴¹¹ Булгаргаз, Новини, Прессъобщение (01.01.2021) /Bulgargaz, News, Press release (01.01.2021) *available only in Bulgarian* / < <https://www.bulgargaz.bg/bg/novini/292> > accessed 2 January 2022.

⁴¹² Булгаргаз, Новини, Прессъобщение относно продажна цена на газа за януари 2022 г. (01.01.2022) /Bulgargaz, News, Press release regarding the natural gas selling price for January 2022 (01.01.2022) *available only in Bulgaria* / < <https://www.bulgargaz.bg/bg/novini/361> > accessed 2 January 2022.

⁴¹³ Jones, EU Energy Law Volume II: EU Competition Law and Energy Markets (n 72), 369, 3.601.

Chapter V: SECURITY OF SUPPLY

*'Energy and the security of its supply are fundamental to Europe's economy and the living standards of its citizens'*⁴¹⁴

The chapter aims to give general remarks about energy security policy of the European Union which is crucial for the EU policy makers but only in terms of security of natural gas supply. Hence, with respect to natural gas sector the security of supply is crucial because for the transportation of the gas predominantly is relied on pipeline infrastructure that in some places in EU is insufficient and thus puts in risk the supply security.

In Bulgaria secure supplies were an issue in 2009 Ukraine-Russia gas crisis which left Bulgaria without gas and what was more concerning is that at that time Bulgaria did not have any other supply sources or routes⁴¹⁵. That crisis revealed how vulnerable Bulgaria was when joined the EU in 2007. Thus, security of supply is not only tool for immediate urgency but also a strategic challenge for the policy maker⁴¹⁶.

The security of supply shall be referred to as 'the ability of a country's energy supply system to meet final contracted energy demand in the event of a gas supply disruption'⁴¹⁷. In order to mitigate the risk in events of disruption, effective security of supply is determined by the structure of the national gas grids and the consumption habits of the national market and more particularly the policies set up by the state⁴¹⁸.

Furthermore, with respect to the security of supply, the policy shall be discussed from the public supplier's side Bulgargaz and moreover, the Southern Gas Corridor (SGC) shall be discussed as a route to be used by Bulgaria to diversify the sources of gas

⁴¹⁴ Günther H. Oettinger, European Commissioner for Energy, Power market challenges and the European Energy Security Strategy, Union of the Electricity Industry (Eurelectric) Annual Convention, SPEECH/14/443 (London, 3 June 2014) < https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_14_443 > accessed 11 October 2021

⁴¹⁵ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 225.

⁴¹⁶ Øystein Noreng, Securing Natural Gas Supplies to Europe: Lessons and Prospects, The Journal of Energy and Development (Volume 33, Issue 1, 2007) 57-80 < <https://www.jstor.org/stable/24813047> > accessed 11 November 2021, 65

⁴¹⁷ Florent Silve and Pierre Noël, Cost Curves for Gas Supply Security: The Case of Bulgaria, Energy Policy Research Group, University of Cambridge, EPRG Working Paper 1031 and Cambridge Working Paper in Economics 1056 (September 2010) < <https://www.econ.cam.ac.uk/research-files/repec/cam/pdf/cwpe1056.pdf> > accessed 31 October 2021, 3.

⁴¹⁸ *ibid.*

supplies and long-term contracts shall be reviews as a tool to secure gas supplies. Hence, particularly the IGB pipeline connects Bulgaria with the SGC.

Nevertheless, it shall be noted that vertical integration is also seen as a tool to secure the supplies⁴¹⁹.

Relying predominantly on gas import, Europe is trying to secure its supply demands. Therefore, an import dependency index is used to illustrate the vulnerability of Europe.

In terms of natural gas import dependency for the whole Union, it was around 89 percent in 2019, while around 83,8 percent in 2018⁴²⁰.

In terms of dependence, in 2019 Bulgaria was 100 percent dependent on gas import, where Bulgargaz imported 99,24 percent of the gas delivered⁴²¹.

1. Introductory Remarks

Since energy is a crucial part of Europeans' lifestyle and the economy, secure and undisrupted energy supplies at affordable prices are expected⁴²².

Moreover, being crucial for the EU policy makers, the security of supply reflects the expectations of both, households and industry to receive continuously and constantly available goods – namely natural gas, since potential interruption cause disruption not only in the economy, but at household level⁴²³.

The security of supply can be discovered in the policy of the Union even before the liberalization policy appeared on the agenda and the governmental-inclined

⁴¹⁹ Fereidoon P. Sioshansi (Eds.), *Competitive Electricity Markets: Design, Implementation, Performance* (First edition 2008, Elsevier) ISBN: 978-0-08-047172-3, Foreword xxi.

⁴²⁰ Eurostat, Energy imports dependency, Natural gas < https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_ID_custom_1727207/default/table?lang=en > accessed 8 December 2021; Eurostat, Natural gas supply statistics < https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Natural_gas_supply_statistics > accessed 11 October 2021; for energy dependency rate see further: Eurostat, Glossary: Energy dependency rate < https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Energy_dependency_rate > accessed 11 October 2021.

⁴²¹ Eurostat, Energy imports dependency, Natural gas (n 420); Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, Annual Report to the European Commission, July 2020 < https://www.dker.bg/uploads/2020/report_EC_2020_EN.pdf > accessed 11 October 2021, 42.

⁴²² European Commission, Commission Staff Working Document, In-depth study of European Energy Security Accompanying the document Communication from the Commission to the Council and the European Parliament: European energy security strategy (Brussels, 2.7.2014) SWD (2014) 330 final/3 < https://ec.europa.eu/energy/sites/ener/files/documents/20140528_energy_security_study.pdf > accessed 12 October 2021, 3

⁴²³ Christopher Jones, *EU Energy Law Volume I The Internal Energy Market* 4th Edition (n 84), 655, 13.1

regulation and established monopoly incumbents usually succeeded to guarantee that security of supply even at the price of overinvestment and cost allocation over the end consumers⁴²⁴. That method of functioning however seemed inefficient from economic point of view and thus it was construed that the marked models developed in UK and US could achieve no worse effect in terms of security of supply but at lower prices for the consumers and since geographically larger market could provide safety network to solve issues at national level⁴²⁵.

However, particular legislation in the field of security of supply has been adopted. The first instrument is the 2004 Security of Supply Directive⁴²⁶, where it prescribed⁴²⁷:

- Creation of the Gas Coordination Group; (Art. 7 of the Directive)
- Ensuring gas supply to protected household customers in events of (a) a partial disruption of national gas supplies during a period to be determined by Member States taking into account national circumstances; (b) extremely cold temperatures during a nationally determined peak period; (c) periods of exceptionally high gas demand during the coldest weather periods statistically occurring every 20 years; (Art. 4 of the Directive);
- Instruments to enhance the security of gas supply;

Regulation (EU) No 944/2010⁴²⁸ is considered as a major step in consolidating the policy of energy security⁴²⁹. Therefore, the Regulation provided for⁴³⁰:

- reiteration of the importance of the protected customers by broadening its scope, namely all household customers connected to a gas distribution network and Member States could decide to include also '(a) small and medium-sized enterprises, provided that they are connected to a gas distribution network, and essential social services, provided that they are connected to a gas distribution or transmission network, and provided that all these additional customers do not represent

⁴²⁴ Talus, EU Energy Law and Policy: A Critical Account (n 168), 98.

⁴²⁵ *ibid*, 99.

⁴²⁶ Council Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply, OJ L 127, 29.4.2004, 92-96.

⁴²⁷ Yassine Rqiq, Jesus Beyza, Jose M. Yusta, Ricardo Bolado-Lavin, Assessing the Impact of Investments in Cross-Border Pipelines on the Security of Gas Supply in the EU, *Energies* (Volume 13, Issue 11, 2020) 2913 <<https://doi.org/10.3390/en13112913>> accessed 2 December 2021, 4.

⁴²⁸ Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC Text with EEA relevance, OJ L 295, 12.11.2010, 1-22.

⁴²⁹ Oyewunmi, Energy Security and Gas Supply Regulation in the European Union's Internal Market (n 9), 195.

⁴³⁰ Rqiq, Beyza, Yusta, Bolado-Lavin, Assessing the Impact of Investments in Cross-Border Pipelines on the Security of Gas Supply in the EU (n 427), 4.

- more than 20 % of the final use of gas; and/or (b) district heating installations to the extent that they deliver heating to household customers and to the customers referred to in point (a) provided that these installations are not able to switch to other fuels and are connected to a gas distribution or transmission network'; (Art. 2 of the Regulation)
- Obligation on the Member States to develop National Risk Assessments (RA), Preventive Action Plans (PAP), and Emergency Plans (EP); Adherence to Standards (Infrastructure—or N-1—Standard elaborated in Annex I of the Regulation and Supply Standard prescribed by Art. 8);
 - Obligation to develop reverse flows at all cross-border points for security of supply (Art. 7 of the Regulation), except for the derogation of Art. 6, Para. 5 in the case of connections to production facilities, to LNG facilities and to distribution networks;
 - Introduction the concept of solidarity between Member State and its reflection in the Regional Cooperation 'involving natural gas undertakings, Member States and national regulatory authorities to enhance, among other objectives, the security of supply and the integration of the internal energy market' where Bulgaria, alongside with Greece and Romania shall cooperate aiming to enhance individual and collective security of supply (Annex IV of the Regulation);
 - The obligation of the European Commission to assess the Preventive Action Plans and the Emergency Plans;

Among these instruments, I could point out the reverse-flow obligation. Relying until 2016 on one import route, and moreover, restricted gas-to-gas competition from Gazprom's side, which made Bulgaria relatively closed market dependent on one route and one supplier. Therefore, the bi-directional gas flow is crucial to diversify gas sources at least on contractual level and allowing Bulgaria to enter in swap deals. Hence, in 2017 the first natural gas quantities were delivered from Bulgaria to Romania and the IP Kulata/Sidirokastro was reversed⁴³¹.

The Regulation (EU) 994/2010 is the first EU legislation introducing bi-directional capacity on cross-border point, as it was elaborated by the AG Jääskinen in the case Case C-198/12, *European Commission v Republic of Bulgaria*⁴³². Moreover, there are two types of reverse flows, physical and virtual (also called contractual), where the former

⁴³¹ Bulgartransgaz EAD, About us, History and experience < <https://www.bulgartransgaz.bg/en/pages/company-history-9.html> > accessed 14 January 2022.

⁴³² Case C-198/12, *European Commission v Republic of Bulgaria*, ECLI:EU:C:2013:739, Opinion of AG Jääskinen, Para. 43.

requires gas transport in the usual direction to be stopped and then the gas flows physically in the opposite direction, where by the latter the same effect is achieved as in physical reverse flow, but the gas is withdrawn from the flowing gas in the usual direction and therefore does not actually flow backwards⁴³³.

Furthermore, I find appropriate to point out that both the 2010 Security of Supply Regulation and its Recast introduced the so-called N-1 Formula, which prescribes that gas markets that are dependent on for example a single supply pipeline, gas storage facility or LNG terminal shall ensure (a) redundant infrastructure in order to meet supply disruptions or (b) in case of such disruptions the demand shall be covered⁴³⁴. Furthermore, in particular for Bulgaria, the Commission acknowledged that the IGB gas pipeline contributes to the implementation of the N-1 formula by increasing the terms of security of supply in Bulgaria by around 40% and in terms of N-1 situation, the project will enable the Bulgarian system to cover more than 110% as of 2020 and more than 140% as of 2025 of the peak daily demand in Bulgaria⁴³⁵.

However, in 2016 the Commission proposed a repeal of Regulation 994/2010⁴³⁶ and in 2017 the Commission adopted a Recast Security of Supply Regulation 2017/1938⁴³⁷. The regulation provides for⁴³⁸:

- Maintenance and reinforcement of basic concepts such as protected customers, Risk Assessments (RA), Preventive Action Plans (PAP), and Emergency Plans (EP), Infrastructure, and Supply Standards;
- Introduction of the concept of 'solidarity protected customer' and promotion of to set fair prices for gas shared under the principle of solidarity;
- Development of the regional approach by making mandatory the development of regional RAs;

⁴³³ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), footnote 26.

⁴³⁴ Jones, *EU Energy Law Volume I The Internal Energy Market* 5th Edition (n 159), 721, 13.78.

⁴³⁵ Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria (n 177), Rec. 60.

⁴³⁶ European Commission, Proposal for a Regulation of the European Parliament And of the Council concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (Brussels, 16.2.2016) COM(2016) 52 final 2016/0030 (COD) < https://eur-lex.europa.eu/resource.html?uri=cellar:33516200-d4a2-11e5-a4b5-01aa75ed71a1.0018.02/DOC_1&format=PDF > accessed 7 December 2021.

⁴³⁷ Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010, OJ L 280, 28.10.2017, 1 – 56.

⁴³⁸ Rqiq, Beyza, Yusta, Bolado-Lavin, *Assessing the Impact of Investments in Cross-Border Pipelines on the Security of Gas Supply in the EU* (n 427), 4.

- Cooperation with neighboring countries signatories of the Energy Community Treaty;

By the virtue of Art. 4, Para. 2, p. 4a of the Energy Act, Bulgaria has designated the Minister of Energy as the competent authority with regard to the security of supply under Regulation (EU) 2017/1938.

2. Diversification of supply sources and routes

Since Bulgaria, part of the CEE area, until 2019 has been dependent on single supplier for almost 100 percent of the natural gas imported to the country, namely Russian Federation and therefore, a diversification of supply sources is necessary.

However, it is important to note, that a slight decrease of the Russian gas imported to Bulgaria is evident. In 2018 99,9 % of the gas imported to Bulgaria 99,8 % of it came from the Russian Federation⁴³⁹ while in 2019 Bulgaria relied on 99,8 % imported gas, where 81,6 % of it came from the Russian Federation and in 2020 on 99 % imported natural gas, where 'only' 76,1 % of from the Russian Federation⁴⁴⁰. That indicates that in 2019 and 2020 alternative sources for gas appeared on the horizon, including liquefied natural gas from the United States through the terminal in Revithoussa, Greece and in 2019 more than 18% of natural gas deliveries to Bulgaria came from alternative sources, while in 2020 that share of the overall consumption of the country grew up to 24%⁴⁴¹.

Pipelines are the default method to deliver natural gas and thus new infrastructures are shall enhance security of supply and certain gas corridors are enlisted by the commission as a priority to construct. In particular, the Southern Gas Corridor (SGC) aims to bring gas from Caspian Region to Europe, inter alia Bulgaria⁴⁴².

As noted by the Commission, it is crucial to improve the diversification of gas supplies where no Member State is dependent on one import source of supply⁴⁴³.

⁴³⁹ Bulgartransgaz, 2020 - 2029 Ten-Year Network Development Plan (n 289), 14.

⁴⁴⁰ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 12.

⁴⁴¹ *ibid.*

⁴⁴² European Commission, Energy, Topics, Energy Security, Diversification of gas supply sources and routes < https://ec.europa.eu/energy/topics/energy-security/diversification-of-gas-supply-sources-and-routes_en > accessed 13 October 2021.

⁴⁴³ European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Long term infrastructure vision for Europe and beyond, COM(2013) 711 final (Brussels, 14.10.2013), 2.

Viewed in general, SGC shall reach capacity of 16 bcm/year by the mid-2020s and thus reduce the reliance of some countries from the Southern Europe on Russian gas. As only 10 bcm are to be sold in Europe, it could hardly have a significant impact on the diversification on EU level since the consumption of natural gas in 2019 has been 413 bcm⁴⁴⁴ ⁴⁴⁵. Thus, being under 3% of the total EU consumption, it would not significantly affect the Union⁴⁴⁶, but still the negotiated for Bulgaria 1 bcm/year corresponds to around one third of the usual inland consumption being 2,9 bcm for 2019⁴⁴⁷. Therefore, the Azeri gas could play positive role for diversification of natural import but only if the price is competitive with respect to the liquid western gas hubs. Henceforth, in 2013 Bulgaria signed 25-year agreement with SOCAR⁴⁴⁸ for gas supply from Shah Deniz II for 1 bcm/year⁴⁴⁹.

The Southern Gas Corridor comprises three pipelines, namely South Caucasus Pipeline (SCP), Trans-Anatolian Pipeline (TANAP) and Trans Adriatic Pipeline (TAP)⁴⁵⁰.

⁴⁴⁴ Eurostat, Supply, transformation and consumption of gas < https://ec.europa.eu/eurostat/databrowser/view/NRG_CB_GAS_custom_1641647/default/table?lang=en > accessed 24 November 2021.

⁴⁴⁵ Marco Siddi, The EU's Botched Geopolitical Approach to External Energy Policy: The Case of the Southern Gas Corridor, *Geopolitics*, Volume 24, Issue 1: The rise of geopolitics in the EU's approach in its Eastern Neighbourhood (2019), 124-144 < <https://doi.org/10.1080/14650045.2017.1416606> > accessed 15 October 2021, 132.

⁴⁴⁶ Ibid.

⁴⁴⁷ Eurostat, Supply, transformation and consumption of gas (n 444).

⁴⁴⁸ 'The State Oil Company of the Azerbaijan Republic (SOCAR) is involved in exploring oil and gas fields, producing, processing, and transporting oil, gas, and gas condensate, marketing petroleum and petrochemical products in domestic and international markets, and supplying natural gas to industry and the public in Azerbaijan', Source: The State Oil Company of the Azerbaijan Republic (SOCAR), Company, About SOCAR, Discover SOCAR < <https://socar.az/socar/en/company/about-socar/discover-socar> > accessed 15 October 2021.

⁴⁴⁹ Fakhri J. Hasanov, Ceyhun Mahmudlu, Kaushik Deb, Shamkhal Abilov, Orkhan Hasanov, The role of Azeri natural gas in meeting European Union energy security needs, *Energy Strategy Reviews*, Volume 28 (2020) 100464, ISSN 2211-467X < <https://doi.org/10.1016/j.esr.2020.100464> > accessed 15 October 2021, 4; Министерство на енергетиката, Новини, Акценти, Т. Петкова: Договорът за доставка на газ от Шах Дениз 2 има ключово значение за нашите енергийни приоритети /Ministry of Energy, News, Highlights, Т. Петкова: Gas supply agreement from Shah Deniz 2 has key importance for our energy priorities *available only in Bulgarian* / < <https://www.me.government.bg/news/t-petkova-dogovor-at-za-dostavka-na-gaz-ot-shah-deniz-2-ima-klyuchovo-znachenie-za-nashite-energiini-prioriteti-2657.html?p=eyJ0eXBlljoiaG90bmV3cyIsInBhZ2UiOjV9> > accessed 15 October.

⁴⁵⁰ Isabella Ruble, European Union energy supply security: The benefits of natural gas imports from the Eastern Mediterranean, *Energy Policy*, Volume 105 (2017) 341-353, ISSN 0301-4215 < <https://doi.org/10.1016/j.enpol.2017.03.010> > ; <https://www.sciencedirect.com/science/article/pii/S0301421517301507> > accessed 14 October 2021; Southern Gas Corridor, About us < <https://www.sgc.az/en/about> > accessed 14 October 2021.

Figure 8: Southern Gas Corridor



Source: Erdal Tanas Karagöl, Salihe Kaya, Energy Supply Security and The Southern Gas Corridor (SGC)

In the case of Europe, before the appearance of the LGN on the agenda, the typical import of gas to Europe from Russia was through pipelines and commercial relations based on long-term contracts with take-or-pay clauses, where the gas from Russia typically came to Europe either from Ukraine or Belarus⁴⁵¹.

Furthermore, Southern Gas Corridor (SGC) is in the current and fourth consecutive list of Projects of Common Interest according to Delegated Regulation (EU) 2020/389⁴⁵².

The Projects of Common Interest (PCIs) presented in the consecutive lists aim at integrating neighbouring Member States' networks, diversifying the sources of gas supply by opening new gas corridors and offering alternatives to Member States dependent on a single source of oil or gas supply⁴⁵³.

Southern Gas Corridor is seen as an incentive for building new gas infrastructure that connects the Caspian gas supplier with the EU countries, inter alia Bulgaria, in order to diversify both suppliers and routes⁴⁵⁴.

⁴⁵¹ Özdemir, Buğra Yavuz, Tokgöz, The Trans-Anatolian Pipeline (TANAP) as a unique project in the Eurasian gas network: A comparative analysis (n 188), 98.

⁴⁵² Commission Delegated Regulation (EU) 2020/389 (n 220).

⁴⁵³ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 45

⁴⁵⁴ Schröder, EU Gas Supply Security, A Political Vision of the Southern Gas Corridor (n 8), 20.

The Corridor is aimed at contributing to diversification and thus enhancing competition in EU markets and in the case of Bulgaria – to reduce the dependence on Russian gas⁴⁵⁵.

In the SEE region, increasing interconnections and new supply routes are necessary, especially in cases of disruptions of supply⁴⁵⁶. Improvements in terms of interconnection points and between Member States and respectively new supply routes and storage facilities reflect the EU approach to mitigate that risk through policy instruments⁴⁵⁷. As discussed above, the storage shall balance daily and seasonal fluctuations in demand⁴⁵⁸.

The Southern Gas Corridor, aiming to deliver gas from Azerbaijan, is believed to enhance the diversification of import routes and guarantee long-term security of gas supply⁴⁵⁹.

The initiative about the Southern Gas Corridor dates back to 2008 and is construed as priority infrastructure, that shall supply Europe with gas from the Caspian region⁴⁶⁰.

The EU gas market is characterized by dependency on imported gas, delivered mainly through pipelines⁴⁶¹.

Thus, the Union aims at enhancing the diversification of supply sources and development of infrastructure connectivity. The New Security of Supply Regulation prescribes the principle of solidarity and regional cooperation in order to have the Member States prepared in events of interruptions of supply⁴⁶².

⁴⁵⁵ Siddi, The EU's Botched Geopolitical Approach to External Energy Policy: The Case of the Southern Gas Corridor (n 445), 131-132.

⁴⁵⁶ Manuel Welsch (eds.), Europe's Energy Transition Insights for Policy Making (Academic Press, 2017) ISBN 9780128098066 < <https://doi.org/10.1016/B978-0-12-809806-6.00011-0> ; <https://www.sciencedirect.com/science/article/pii/B9780128098066000110> > accessed 13 October 2021, 68.

⁴⁵⁷ *ibid*, 69.

⁴⁵⁸ European Commission, Press corner, EU Liquified Natural Gas and gas storage strategy, MEMO/16/310 (Brussels, 16 February 2016) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_16_310 > accessed 13 October 2021

⁴⁵⁹ Welsch (eds.), Europe's Energy Transition Insights for Policy Making (n 456), 71.

⁴⁶⁰ Commission of the European Communities, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Second Strategic Energy Review, An EU Energy Security and Solidarity Action Plan, COM(2008) 781 final (Brussels, 13.11.2008) < <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0781:FIN:EN:PDF> > accessed 14 October 2021, 4.

⁴⁶¹ Özdemir, Buğra Yavuz, Tokgöz, The Trans-Anatolian Pipeline (TANAP) as a unique project in the Eurasian gas network: A comparative analysis (n 188), 97.

⁴⁶² Ruble, European Union energy supply security: The benefits of natural gas imports from the Eastern Mediterranean (n 450), 343.

Furthermore, recently the Commission has pointed out the role of the LNG in the policy of security of supply. Since EU is considered as the biggest importer of gas in the world, diversification of supply sources is crucial not only in terms of security but in terms of enhancement of competition too⁴⁶³.

3. Long-term natural gas contracts and take-or-pay obligations

I find it suitable to place the issue of long-term contracts in the current chapter, namely as a tool to ensure the security of supply on Bulgarian national gas market.

In the past long-term supply contracts with take-or-pay obligations played an important role in enhancing the development of gas industry⁴⁶⁴. Thus said, being economically close to the Soviet Union, Bulgaria was dependent on Russian gas and the investments in the gas transmission infrastructure probably have been tied to the segment of supply and Bulgaria had to commit to certain specified minimum volumes at arguably competitive price, typically oil-indexed.

Currently, the Third Gas Directive also recognizes the role of such agreements in the supply portfolio, where Rec. 42 of it acknowledges it.

Moreover, with respect to that issue, the Security of Supply Regulation⁴⁶⁵ prescribes that contracts longer than 1 year shall be notified to the competent authority (Art. 14, Para. 6) which obviously includes the long-term contract but not the contracts themselves but certain clauses with regard inter alia duration, yearly contracted volume, delivery points, daily and monthly volumes and others which have insignificant role in my view. Thus, the Commission gets general overview where the market players rely on long-term contracts in order to secure the supplies.

In the case of Bulgargaz, such long-term contracts provide certainty and stability in supply and makes the Bulgarian public supplier a trustworthy partner among its customers which are in the energy and chemical industry mainly, respectively with 35 percent and 33 percent in Bulgargaz' portfolio for 2020⁴⁶⁶.

⁴⁶³ European Commission, EU Liquified Natural Gas and gas storage strategy (n 458).

⁴⁶⁴ International Energy Agency, Security of Gas Supply in Open Markets, LNG and Power at a Turning Point (15 September 2004) ISBN 9789264108073 < <https://doi.org/10.1787/9789264108073-en> > accessed 16 October 2021, 100.

⁴⁶⁵ Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010, OJ L 280, 28.10.2017, 1 – 56.

⁴⁶⁶ EWRC, Annual Report to the European Commission, July 2021 (n 256), 40.

In general, the long-term contracts are among the traditional instruments along with the diversification of routes and sources, interconnections, storage facilities⁴⁶⁷ and flexible instruments such as interruptible capacity agreements and spot LNG agreements.

The long-term contracts reflect the state of the energy markets before the contradictory policies of security of supply and liberalization particularly in terms of market opening. While these types of agreements are considered as deficiency of a liberalized gas market, at the same time they provide stability to tackle the increase of prices where the markets are liberalized⁴⁶⁸.

Currently the public supplier – Bulgargaz is importing natural gas on grounds of contract with Gazprom dating back in 2012⁴⁶⁹ which shall expire at the end of 2022⁴⁷⁰.

In the current situation it can be argued that such long-term contract secures the supplies in the case of Bulgaria due to the facts that (i) the market is highly concentrated; (ii) Bulgargaz is the sole public supplier on the national gas market; (iii) the regulated prices by EWRC; (iv) the lack of the construction of the IGB pipeline; (v) the disruption in supply of Azeri gas through the negotiated temporary transmission route; (vi) lack of physical access to LNG at this point.

However, it shall be noted that long-term supply contracts are seen as distorting competition since the lock-in the demand of supply mainly through take-or-pay clauses and thus new entrants are unlikely to appear in a given market⁴⁷¹.

Taking into account the position of Bulgargaz on the market, it shall provide reliable supply mix to its customers. Due to the fact that currently the public supplier holds a dominant position in its segment and alongside with the other main market incumbent acting in transmission and storage, a drive into the opposite direction is unlikely. In my view, due to the lack of interconnectivity, the state intervention in the gas industry plays crucial role for the security of supplies for the energy and chemical

⁴⁶⁷ International Energy Agency, Security of Gas Supply in Open Markets, LNG and Power at a Turning Point (n 464), 60.

⁴⁶⁸ Angus Jonston, Guy Block, EU Energy Law (Oxford University Press, 1st Edition, 2012) ISBN 978–0–19–966524–2, 222, 8.142.

⁴⁶⁹ EWRC, Annual Report to the European Commission, July 2021 (n 256), 39.

⁴⁷⁰ Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria (n 177), 22, Rec. 85.

⁴⁷¹ Yu, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (n 38).

consumers since the public supplier provides the business and end suppliers predictability in terms of supply and price of the gas.

Despite the fact, that the IGB interconnector is construed by the Commission as part of the prioritized Corridor North-South Gas Interconnections in Central Eastern and South Eastern Europe (NSI East Gas)⁴⁷², the default route for delivering the Azeri gas is namely IGB where firm capacity is there to secure the delivery of that gas⁴⁷³ which is delivered on grounds of another long-term supply contract lasting for 25 years. The IGB project importance could be recognized additionally since currently the Azeri gas is delivered to Bulgaria on an alternative route through the Greek transmission network where Bulgargaz has booked interruptible capacity and in 49 out of 244 days period Bulgargaz has not received the total daily gas volumes agreed upon⁴⁷⁴. Pipeline capacity for gas transportation could either firm or interruptible, where the former provides a right to a network user to transport gas on a guaranteed basis, while the latter means that gas delivery may be subject to interruptions by the network operator⁴⁷⁵. Therefore, the interruptible capacity puts in jeopardy the position of a supplier as a reliable partner among its customers.

In conclusion, these long-term contracts are a useful tool for markets such as the Bulgarian one relying predominantly on import where for a long period of time Bulgaria has been dependent on one route and one supplier. Therefore, the market is not integrated and the only tool to ensure at least to some extent security of supply has been the choice of long-term contract with Gazprom. Despite their important role in the security of supply, these contracts shall not constitute barrier to entry and distort the competition⁴⁷⁶.

4. Concluding remarks

As considered above, Bulgaria lags behind in terms of developing its infrastructure and strengthening its interconnectivity with the neighboring countries, diversification of supply sources and routes still does not have huge impact on the market. Meanwhile, as already observed key steps are undertaken regarding infrastructure

⁴⁷² Commission Delegated Regulation (EU) 2020/389 (n 220), Annex VII, B (6).

⁴⁷³ Bulgargaz, News, Press release (01.09.2021) < <https://www.bulgargaz.bg/en/news/336> > accessed 15 October 2021.

⁴⁷⁴ *ibid.*

⁴⁷⁵ Commission Decision of 17.12.2018, AT.39849 – *BEH Gas* (n 59), Rec. 35.

⁴⁷⁶ Anna Creti, Bertrand Villeneuve, Longterm Contracts and Take-or-Pay Clauses in Natural Gas Markets, *Energy Studies Review* (Volume 13, Issue 1, 2004) 75-94 < <https://energystudiesreview.ca/esr/article/view/466> > accessed 10 November 2021, 86-87.

investments which will allow better interconnectivity with neighbouring countries and thus gas-to-gas competition on the wholesale market would be enhanced.

The intervention of the state is evident taking into account the existence of a public supplier.

Taking into account (i) the above-said in the current chapter, (ii) the fact that the IGB is unlikely to start operating in 2022 resulting in import for 2022 of around only 1/3 of the negotiated Azeri gas yearly via an alternative route⁴⁷⁷ and (iii) the fact that Bulgargaz is unlikely to lose its dominant position on the market in the near future, in order to ensure supplies, probably a new long-term contract with Gazprom shall be sought. Hence, it shall be acknowledged that another long-term contract would secure the dominant position of the state-owned public supplier at the wholesale segment of the market.

Thus said, based on the steps undertaken and the infrastructures either already in operation or still in progress, Bulgaria is on its way to diversify its sources and routes. However, it is still far from being able to have a direct access to the gas offered and traded in Western Europe and have it transported to Bulgaria physical via pipelines. Moreover, such transportation may not be economically viable.

⁴⁷⁷ Information publicly revealed by the executive director of Bulgargaz in the media landscape.

Page intentionally left blank

Chapter VI:

CONSUMER WELFARE

1. Introductory Remarks

Consumer welfare is a central goal for competition law rules and protecting competition on the market aims at ‘enhancing consumer welfare and ensuring an efficient allocation of resources’⁴⁷⁸. However, the consumer welfare is discussed in separate chapter for the reasons that (i) it is presumed that the regulated prices prescribed by the Energy Act aim at protecting the final consumer in Bulgaria and (ii) the protection of ‘vulnerable customers’ is important for the policy maker by its prescription in the Third Gas Directive. Therefore, the topic is not part of the competition law chapter and is not discussed in the light of the consequences of the well-functioning competitive market.

The regulation of the gas sector comprises two presumably contradictory objectives, namely: (i) economic regulation which aims at liberalizing the market and introducing competition and (ii) social regulation aiming at providing public services obligations aimed at correcting the impact of the liberalization process⁴⁷⁹. The second chapter dealt with the liberalization process while part of the current chapter will deal how public services obligations find place on the national market. Two important issues shall be dealt with in the current chapter, namely (i) how regulated prices may be positive for a market like the Bulgarian one and (ii) the substance behind the figure of the vulnerable customer.

With the liberalization policy the Commission aimed at enabling EU companies to bear the fruits of freeing gas markets and enhancing the competition in terms of ‘increased efficiency and lower prices’ and moreover, to ensure that EU customers shall receive lower domestic bills for gas⁴⁸⁰.

⁴⁷⁸ Richard Whish, David Bailey, *Competition Law* (Oxford University Press, Seventh Edition, 2012) ISBN 978-0-19-958655-4, 19.

⁴⁷⁹ Genoud, Varone, *Does Privatization Matter? Liberalization and regulation: The case of European electricity*, *Public Management Review* (n 18), 236.

⁴⁸⁰ Commission of the European Communities, *Communication from the Commission to the Council and European Parliament, Completing the internal energy market, Proposal for a Directive of the European Parliament and the Council amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal market in electricity and natural gas, Proposal for a Regulation of the European Parliament and of the Council on conditions for access to the network for cross-border exchanges in electricity*, COM(2001) 125 final (Brussels, 13.3.2001) < [https://eur-](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001COM125)

In a properly functioning competitive market, the price mechanism would lead to an allocation and use of the goods in order to ensure prosperity for the energy consumers and lower prices backed by efficiency gains where the latter could include cost reductions based either on more efficient operation of the assets or through new and respectively more efficient energy production technologies⁴⁸¹.

2. Regulated prices

With the policy of liberalization, the EU policy maker turned toward market-based prices with the rationale behind it that 'regulated prices are used to manage state-run monopolies of vertically-integrated undertakings, while market-based prices are viewed as necessary for a proper, competitive market to function'⁴⁸². Two important reasons could be outlined why regulated prices are deemed to be incompatible with a competitive market, namely (i) methodology for determining end customer prices is contrary to market-based price methodology and (ii) regulated prices are heritage of state-run sectors⁴⁸³ characterized with a vertical integration and national champions.

For the purpose of that chapter of the thesis the terms final/end customers/consumers are interchangeable. The final customer shall be construed as one purchasing gas for own use following the definition in Art. 2(27) of the Third Gas Directive and thus, at least all household customers shall be construed as end customers.

In general, regarding the gas sector, consumer and business do not require the same thing. While consumers wish security of gas supply, the market incumbents search for security of the market⁴⁸⁴. Furthermore, it can be added that every consumer strives after lower prices, besides the security of gas supplies. Along with the energy security, namely the lowering of the prices lies beneath the liberalization idea⁴⁸⁵.

lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0125:FIN:EN:PDF > accessed 31 October 2021, 33.

⁴⁸¹ Simone Pront-van Bommer, A Reasonable Price for Electricity, *Journal of Consumer Policy*, Volume 39, Issue 2 (June 2016), 141-158 < <https://doi.org/10.1007/s10603-015-9300-x> > accessed 1 November 2021, 145.

⁴⁸² Patricia de Suzzoni, Are regulated prices against the market, *European Review of Energy Markets*, Volume 3, Issue 3 (October 2009) < <https://eeinstitute.org/european-review-of-energy-market/EREM-9-Article-Patricia-de-Suzzoni.pdf> > accessed 2 November 2021, 3.

⁴⁸³ *ibid*, 12.

⁴⁸⁴ Jones, *EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union* (n 10), 46-47.

⁴⁸⁵ Yu, *Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem* (n 38).

As discussed above, from 2007 the gas markets at EU level are open even for the end customers who also can constitute eligible customers within the meaning of the Directives. Furthermore, the consumer protection is clearly important for the Union legislator since in Art. 3, Para. 3 of the Third Gas Directive, Member States are addressed to take the appropriate measures to protect the final consumers and more importantly to safeguard the vulnerable ones.

It is not hard to guess that proper functioning of the market depends on the competition intensity which requires a sufficient number of market players not only on the supplier's side but on the consumer' side too⁴⁸⁶.

With regard to the end consumers, I find the role of the public supplier Bulgargaz crucial. Taking into account the general understating that if a player on the supplier's side withdraws from the marketplace in a liquid market, this should not materially affect prices⁴⁸⁷, the regulated gas prices under which Bulgargaz provides gas are crucial for the final consumers.

Since public services could not always be offered based solely on market mechanisms, the legislator has prescribed certain remedies to tackle events where the provision of these services or the delivery of the goods would be difficult to achieve through market-based mechanisms⁴⁸⁸.

Art. 3, Para. 2 of the Third Gas Directive provides that a Member States have discretion to impose on gas market incumbents, 'in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies...'. Although consumer protection cannot be perceived from that particular provision, Member States could impose public service obligations to protect consumers and ensure that end consumers are charged reasonable prices for the gas they consummate⁴⁸⁹.

It shall be reiterated that regulation of the end price is a sign of insufficient competition in the wholesale gas market⁴⁹⁰. Usually where the prices are regulated and full competition in the retail level of the market is absent, regulatory interference is likely

⁴⁸⁶ Pront-van Bommer, A Reasonable Price for Electricity (n 481), 145.

⁴⁸⁷ *ibid*, 145.

⁴⁸⁸ Talus, EU Energy Law and Policy: A Critical Account (n 168), 89.

⁴⁸⁹ Pront-van Bommer, A Reasonable Price for Electricity (n 481), 145.

⁴⁹⁰ Sioshansi (eds., Competitive Electricity Markets: Design, Implementation, Performance (n 419), Foreword xxi.

to occur⁴⁹¹, and moreover, governmental interference especially in events where the regulatory is dependent on the government.

As the Court of Justice observed in its landmark decision in Case C-265/08 *Federutility*, although the market opening provisions in the Directives do not explicitly prescribe it, the price of the gas shall be determined on supply-demand basis since total liberalization should have been achieved in 2007 with the full market opening and customers has a free choice of supplier⁴⁹² even of a supplier from other Member State (Art. 3, Para. 5 of the Third Gas Directive).

Furthermore, the Court of Justice recognized that Member States have discretion to assess, in general economic interest and respectively 'impose on undertakings operating in the gas sector public service obligations in order, in particular, to ensure that the price of the supply of natural gas to final consumers is maintained at a reasonable level' but striking the balance between the objective of liberalisation and the objective of the necessary protection of final consumers pursued with these obligations⁴⁹³. Nevertheless, these public service obligations shall be clearly defined, transparent, non-discriminatory and verifiable, and that they guarantee equal access for EU gas companies to consumers⁴⁹⁴.

With regard to Bulgaria, the national legislator has recognized that 'transportation, delivery or supply with energy or natural gas of specified quality, regulated price or a price determined under a methodology and other contractual conditions approved by the Commission, which may not be refused due to reasons' not prescribed explicitly are 'service of public interest' (Energy Act, Supplementary provisions, §66b).

Moreover, the Energy Act prescribes that the natural gas delivery from the end suppliers is 'service of public interest' under the meaning of the act and moreover, that the natural gas supply from the public provider is 'service of public interest' in events of natural gas supply to end suppliers and persons licensed to produce and distribute heating energy (Art. 178b of the Energy Act).

The national regulator (EWRC) regulates the prices at which the public supplier (Bulgargaz) sells natural gas to final suppliers of natural gas and persons licensed to

⁴⁹¹ *ibid.*

⁴⁹² Case C-265/08, *Federutility and Others* (n 39), Para. 18.

⁴⁹³ *ibid.*, Para. 32.

⁴⁹⁴ *ibid.*, Paras. 44-47.

produce and distribute heating energy (Art. 30, Para. 1, P. 7 of the Energy Act) and prices at which final suppliers sell natural gas to customers, connected to the respective distribution networks (Art. 30, Para. 1, P. 8 of the Energy Act).

With regard to prices, there is no surprise that free market prices cannot compete with the low regulated prices⁴⁹⁵. However, price-regulated markets could be discriminatory if they only allow one or few market actors to provide services to the price-regulated customers⁴⁹⁶. Despite this, only one undertaking is licensed by EWRC as public supplier in Bulgaria – Bulgargaz which provides services of public interest under the meaning of the Energy Act and still manages its gas portfolio in a way to allocate the benefits of the regulated prices to its customers.

Public service obligations are important from the customers' point of view, nevertheless they may constitute potential breach of market freedom and competition⁴⁹⁷. Nevertheless, they are fundamental requirement with respect to the internal gas market as prescribed in Rec. 44 of the Third Gas Directive. Namely price setting seen as an instrument to meet the public service obligations⁴⁹⁸.

3. Vulnerable customers

I find the topic about vulnerable customers particularly important and closely linked to the regulated price of natural gas.

Protecting vulnerable customers is necessary in a liberalized market since they are considered more susceptible to suffering in competitive market conditions⁴⁹⁹.

Fair prices for the consumers mean not only pricing that is based on market conditions but also taking into account the principle of solidarity, so that the vulnerable customers also have access to these goods or services regardless how high their income is and their domicile⁵⁰⁰.

⁴⁹⁵ Felsmann, B., Vékony, A., Dézsi, B., & Diallo, A., European Barriers in Retail Energy Markets Project: Bulgaria Country Handbook (Luxembourg, 2021, Publications Office of the European Union) ISBN 978-92-76-30248-3, < http://publications.europa.eu/resource/cellar/63383d85-71a3-11eb-9ac9-01aa75ed71a1.0001.01/DOC_1 > 13.

⁴⁹⁶ *ibid*, 24.

⁴⁹⁷ Bartłomiej Nowak, The Electricity and Gas Sector in the EU: the Dilemmas of Public Service Obligations in the Context of State Aid, Yearbook of Polish European Studies (10,2016) 151-167 < https://www.ce.uw.edu.pl/pliki/pw/Y_10A_Nowak_PSO.pdf > accessed 9 November 2021, 158.

⁴⁹⁸ de Suzzoni, Are regulated prices against the market (n 482), 17.

⁴⁹⁹ *ibid*, 27.

⁵⁰⁰ Reisch, Micklitz, Consumers and deregulation of the electricity market in Germany (n 43), 400.

Namely in that regard, The Third Gas Directive in Art. 3, Para. 3 prescribed warranties that Member States shall provide for in order to protect the vulnerable customers. The concept of vulnerable customers is mainly referred to with regard the issue of energy poverty. Energy poverty is generally understood as inability of an individual or a household to adequately heat their homes or pay their energy service bills⁵⁰¹. However, the causes for energy poverty can be found, in case of Bulgaria, in low income not only of the big part of the employed population but of the retirees too, high energy prices and last but not least, poor energy efficiency homes and therefore in the recent years great efforts has been put into renovating household homes.

Therefore, in that regard, the Bulgarian Energy Act defines the term ‘vulnerable customers’ in Supplementary provision, §66b as ‘household customers receiving earmarked aid for electricity, heat or natural gas in accordance with the Social Assistance Act and the statutory instruments for its implementation’. Therefore, the Bulgarian approach to tackle the energy poverty and customer vulnerability is by means of social welfare in terms of financial aid granted for the winter seasons for those energy poverty customers, eligible in accordance with an Ordinance issued by the Minister of labour and social policy⁵⁰².

Thus said, the Bulgarian Energy Act links ‘services of public interest’ and ‘vulnerable customers’ by prescribing that energy market incumbents offering services of public interest shall provide those customers information about the consumption and suspension of supply to vulnerable customers.

In 2020, a survey by the Commission has shown that Bulgaria stands on top with 27,5 percent of people who cannot afford to warm their homes adequately while the average percentage for the EU is 8,2 percent⁵⁰³. It shall be noted that in 2019 that percentage for Bulgaria is 30,1 while for the Union is 6,9 percent. In my view that downwards trend observed in Bulgaria is due to the COVID-19 pandemic and thus

⁵⁰¹ Steve Pye, Audrey Dobbins, Claire Baffert, Jurica Brajković, Paul Deane & Rocco De Miglio, Addressing Energy Poverty and Vulnerable Consumers in the Energy Sector Across the EU, *L'Europe en Formation* (2015/4) No 378, 64-89 < <https://www.cairn.info/revue-l-europe-en-formation-2015-4-page-64.htm> > accessed 4 November 2021, 64.

⁵⁰² Наредба № РД-07-5 от 16 май 2008 г. за условията и реда за отпускане на целева помощ за отопление, в сила от 27.05.2008 г., издадена от министъра на труда и социалната политика /Ordinance No РД-07-5 dated 16 May 2008 on the terms and conditions for granting targeted assistance for heating, in force from 27.05.2008, issued by the Minister for labour and social policy/ < <https://www.mlsp.government.bg/uploads/1/zakoni/naredba-za-otoplenie-28-06-2019.pdf> > accessed 22 December 2021.

⁵⁰³ Eurostat, Inability to keep home adequately warm, EU-SILC survey < https://ec.europa.eu/eurostat/databrowser/view/IILC_MDES01_custom_137816/bookmark/table?lang=en&bookmarkId=f4f90944-6627-4c6b-8035-f966532e2036 > accessed 4 November 2021.

prices for natural gas were significantly lower than usual, especially in the case of Bulgaria and thus more people were enabled to afford to warm their homes.

It shall be noted that in 2020 the number of the gasified household customers (124 652) is significantly lower than the number of electricity household customers (4 544 739)⁵⁰⁴. For comparison, in 2008 the number of gasified household consumers is 44 485⁵⁰⁵. In spite of the abovesaid, the household customers have increased by 11,1 % in 2020 compared to 2019, but still the household gas supply remains low compared to the EU countries⁵⁰⁶.

It is crucial to mention that in 2020 no single household customer connected to the gas distribution network has switched the supplier⁵⁰⁷.

It shall be pointed out also the fact that the Bulgarian legislation has not introduced a legal definition for 'energy poverty'. Despite the negligible number of gasified household customers compared to the number electricity household customers, from legal and social perspective such legal definition is necessary in order to better protect the energy poor households and take appropriate measures. Thus said, only when the number of gasified households increases, the consequence of having introduced the energy poverty into the national legislation would play role in the field of natural gas sector.

4. Concluding remarks

The current chapter points out the importance of the public supplier Bulgargaz and how the regulated part of the market should have positive impact on the vulnerable customers. Moreover, regulatory oversight guarantees the fair gas pricing since the market lacks liquidity and moreover, prevents the dominant player on the wholesale level from pricing overcharging. However, based on its portfolio Bulgargaz for 2021 saved to its customers around BGN 675 million which is the difference between the selling price of Bulgargaz and the prices on the Western European gas market⁵⁰⁸. Thus

⁵⁰⁴ EWRC, Annual Report to the European Commission, July 2021 (n 256), 25, 44.

⁵⁰⁵ Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, State Energy and Water Regulatory Commission (SEWRC), National Report to the European Commission, July 2009 < https://www.dker.bg/PDOCS/rep_sewrc_09_en.pdf > accessed 23 December 2021, 29.

⁵⁰⁶ Bulgartransgaz, 2021 - 2030 Ten-Year Network Development Plan (n 211), 13.

⁵⁰⁷ EWRC, Annual Report to the European Commission, July 2021 (n 256), 46.

⁵⁰⁸ Булгаргаз, Новини, Прессъобщение във връзка с доставките на природен газ от Азербайджан /Bulgargaz, News, Press release regarding the natural gas supplies from Azerbaijan (01.01.2022) *available only in Bulgarian*/ < <https://www.bulgargaz.bg/bg/novini/362> > accessed 14 January 2022.

said, Bulgargaz manages to allocate the benefits and thus protect its customers at national level.

Chapter VII:

CONCLUSION & RECOMMENDATIONS

The last chapter of the master thesis shall not only summarize the results from the research but also give recommendation if such are necessary from legal perspective. Natural gas sector and energy at all are the intersection between legal implementation, geopolitical interest and economic development.

1. Conclusion

In order to answer the research questions regarding the Bulgarian national market and its specifics, a clear view behind the rationale and roots of the liberalization policy at supranational level were elaborated. Moreover, the main instruments of the liberalization policy have been explored in details with emphasis on the Third Energy Package. Applied in practice with respect to the Bulgarian natural gas market, the findings are to be elaborated below.

Regarding the hypothesis of the master thesis, the research shows that:

- ➔ The Bulgarian gas market is quasi liberalized – the *de lege* market opening is prescribed into the national legislation but still no end customer has switched a supplier; additionally, the market is hybrid one since in exclusively listed cases the prices for natural gas are regulated by the national regulatory authority – EWRC;
- ➔ The quasi liberalization resulted in high market concentration in the face of BEH, where its subsidiaries respectively hold dominant position in the wholesale segment (Bulgargaz) and monopoly over the transmission, storage and transit (Bulgartransgaz); hence, despite that only the state-owned Bulgargaz acts as a public supplier and sells on regulated prices, the company ensures a market security and stability with regard to the gas prices it charges its customers; state intervention in the sector is notable and thus, the public supplier barely has competition in its segment but still it fulfills its purpose to provide services in public interest and allocates the benefits of the regulated prices among its customers;
- ➔ The high market concentration characterized by the national champion BEH results in limited market participants and thus, the competition law cases demonstrate that the Bulgarian market for natural gas is susceptible to

influence from competition law rules either having positive effect on the gas prices or allowing changes how the transmission and transit networks are operated in order to guarantee the TPA to essential facilities;

- New infrastructure projects are on the horizon and thus, preconditions for gas-to-gas competition are set and diversification of sources and supplies is already observed on the national market; thus, advancement in the security of supply aspect are made;

These answers of the research questions posed will be discussed in detail below.

To begin with, the energy legislation in Bulgaria has created certain figures such as the public suppliers for both electricity and gas. Thus said, such a characteristic makes that market distinguished for it. The services of public interest the Energy Act imposes on the public supplier for natural gas – Bulgargaz very likely protect the customers buying natural gas from the public supplier under regulated prices, regulated by EWRC.

The analysis of the Bulgarian natural gas market shows that in my view the market is *de lege* liberalized and in compliance with the EU regulatory framework in the gas sector. Hence, the instruments of the liberalization policy discussed in the current paper are implemented in the legislative framework governing the energy policy of the state. However, *de facto* situation differs despite the attempts of the Bulgarian legislator and the Ministry of Energy where the latter is competent to implement the energy policy of the state and the national gas market is quasi liberalized where high market concentration is still evident.

Despite that high concentration, the research shows indisputably that certain steps are taken in order to diversify not only the import supply portfolio but the routes for gas delivery. Moreover, in spite of the delays, the interconnectivity with the neighboring countries has been on the agenda at political and expert level.

Being such a concentrated market and dominated by the national champion BEH, the Bulgarian gas sector as a whole is susceptible to impact of a competition law rules on EU-level. The intervention of the state in the gas sector is evident and the research depicts it clearly. In spite of that intervention however, two specific competition law cases have huge impact on the market. While the Gazprom allowed Bulgargaz to re-negotiate the import price and thus reallocate the benefits to its customers, the *BEH Gas Case* displayed that despite the compliance of only TSO with the liberalization

rules, transmission company staying within the VIU creates opportunities for practices breaching the competition law rules and foreclosing market entries.

Sector regulation is necessary in order to create a level-playing field for all market players and nevertheless stimulate new players to enter it⁵⁰⁹. Since, every natural market has its specifics, despite the usual similarities, there is not gas market role model to follow. Thus, the hard task to design appropriate regulatory environment lies on the government and on the regulator to monitor the market. Thus, where a sector regulation does not achieve the goals envisaged, the competition law rules are used by the Commission to deal directly with certain issues.

As it was already observed in the chapter concerning the EU regulatory framework, the liberalization policy aimed to tackle the typical state regulation in the gas industry in order to remove or mitigate entry barriers into the segments of supply chain⁵¹⁰ by means of market opening and non-discriminatory third-party access to network grids and in the bigger picture – to accomplish the internal market for natural gas.

Bulgaria has been struggling to implement the liberalization policy since its accession to the European Union and therefore the natural gas market is slowly heading into direction of introducing higher level of competition. The development of the gas sector started in the 1970's and therefore it can be described as a heritage from the period when Bulgaria was highly influenced by the Soviet Union which explains not only the dependence on the Russian gas but also the vertical structure of the state-owned incumbent BEH.

As a consequence of the quasi liberalization of the national market, the Bulgarian one developed into highly concentrated one and the national champion BEH appears on the horizon consolidating both – the public supplier Bulgargaz holding the dominant position in the import and supply segment and Bulgartransgaz operating the transmission and storage. As the Case *BEH Gas* displayed, the vertical integration of the BEH Group and market concentration in import and wholesale supply is able to foreclose the competitors willing to enter the market and curtails liquidity. Therefore, the instruments such as unbundling and third-party access are established to prevent the excessive pricing and moreover, the regulatory authority is ensuring the

⁵⁰⁹ Nenova, *Improving Energy Security: Curing the Bulgarian Gas Sector's inefficiencies* (n 323), 42-43.

⁵¹⁰ Özdemir, Buğra Yavuz, Tokgöz, *The Trans-Anatolian Pipeline (TANAP) as a unique project in the Eurasian gas network: A comparative analysis* (n 188), 97.

compliance with these instruments if such regulatory environment is well established by the government and the national legislator.

However, the positive role of the public supplier Bulgargaz, being BEH's subsidiary, shall not be denied. Although regulated gas prices do not reflect the developed and liquid markets and market-based pricing the intervention of the state leads to benefits allocation illustrated by the price Bulgargaz sells the gas to its customers. On the contrary, such pricing achieved by Bulgargaz practically leads to situation where competition in the wholesale market is unlikely to occur particularly in events such as the high natural gas prices in 2021-2022.

In general, the trust in the authorities and in the governmental structures in Bulgaria is questionable from the business' perspective but I argue that the regulated prices put Bulgargaz in a position of a trustworthy supply partner and therefore to some extent predictability is invited on the wholesale segment of the market. Moreover, Bulgargaz is selling at around 20% lower prices than the prices in Western Europe⁵¹¹ taking into account the current gas price crisis in Europe in 2021 and still in 2022. Accordingly, I would like to point out that Bulgargaz provides security on the market for natural gas and stability in the current gas price volatility across Europe.

Usually competition law does not address the sector as a whole but only the practices of particular companies acting in it. However, since Bulgarian market is highly concentrated and integrated, the Gazprom Case has a positive effect on the market where currently the gas price charged for Bulgargaz is reflecting the competitive Western European gas price and moreover, Gazprom took up commitment not to restrict gas-to-gas competition between Bulgaria and its neighbouring Member States and thus swap deals are now possible to enhance at least contractual diversification of supplies. To the contrary, the *BEH Gas* case displayed the deficiency of BEH as vertical integrated company on one side especially with respect to the third-party access instrument of liberalization and therefore, the concerns with regard the TSO staying integrated as ITO are well-founded and on the other, the dependency on one route to import gas combined with exploitation of the vertical integration, the supply arm of BEH has been treated preferably.

⁵¹¹ Булгаргаз, Новини, Прессъобщение относно продажна цена на газа за декември 2021 (01.12.2021) /Bulgargaz, News, Press release regarding the gas selling price for December 2021 (01.12.2021) available only in Bulgarian/ < <https://www.bulgargaz.bg/bg/novini/355> > accessed 7 December 2021.

Nevertheless, the necessity of new infrastructure is acknowledged and therefore Bulgaria has started developing interconnection projects such as the IGB pipeline, listed as a project of common interest, and that project has been granted an exemption from liberalization instrument such as third-party access and unbundling in order not only to bring Azeri gas to Bulgaria but to introduce competition on the market and therefore eventually add LNG to the gas portfolio of Bulgaria in the coming years. The project shall further tackle the security of supply by introducing not only another route but another supply source(s) too.

What could raise concerns is that in my view the ‘service of public interest’ under the meaning of national law shall mean public service obligation within the meaning of the Directives. However, a country dominated by vertically integrated undertaking could rely on these public service obligations in order to limit the competition or slow down the liberalization at all with respect to network access or de facto market opening⁵¹².

Another issue could be the dominant position of Bulgargaz, where there are some factors that deter new market entries such as (i) information on eligible clients in terms of demand of customers from particular economy segments; (ii) the advantage of prior relationship with portfolio of clients and respectively reputation effect based on prior commercial relations; (iii) presumed advantage in terms of transmission capacity reservation compared to competitors⁵¹³.

Whether the regulated prices are against the market shall be assessed on a case-by-case basis taking into account the specifics of the particular market, the methodology for setting these regulated prices, the level of these prices compared to the market prices and the suppliers’ cost structure, for whom are the regulated prices intended and the purpose for that⁵¹⁴. In the case of Bulgaria, it is evident that the regulated prices allow consumers of the public supplier to receive gas under the average prices in Western Europe but at the same time it is likely that such prices deter new market entries since private companies rarely can offer more affordable gas prices.

⁵¹² Nowak, *The Electricity and Gas Sector in the EU: the Dilemmas of Public Service Obligations in the Context of State Aid* (n 497), 159.

⁵¹³ Dominique Finon, *French gas industry in transition : Breach in the public service model*, Institut d’économie et de politique de l’énergie (August 2001) <
[https://inis.iaea.org/collection/NCLCollectionStore/ Public/34/056/34056192.pdf?r=1&r=1](https://inis.iaea.org/collection/NCLCollectionStore/Public/34/056/34056192.pdf?r=1&r=1) >
accessed 9 November 2021, 19.

⁵¹⁴ de Suzzoni, *Are regulated prices against the market* (n 482), 28.

Moreover, the general understating that if a player on the supplier's side withdraws from the marketplace in a liquid market, this should not materially affect prices⁵¹⁵ displays that the role of Bulgargaz as a public supplier is indispensable since not only prices would be affected but security of supply will be threatened since it is the dominant player on the wholesale supply segment. Having Bulgargaz exit the market at least in short-term perspective will certainly shake the natural gas market.

2. Recommendations

Based not only on the findings in the thesis but also on research carried out, certain problems noticed by previous authors, has already been solved such as *inter alia* the introducing the entry-exit tariff model and elimination of the governmental dependence of the national regulator by amendments of the Energy act.

It is important to strategically structure the market in order to ensure the security of supply, protect the vulnerable customers and moreover, enhance market entrance and invite competition.

(A) Listing 50 % of the stocks of Bulgartransgaz on Bulgarian Stock Exchange⁵¹⁶

The most usual way to lower the intervention of the state in a particular sector of the economy is privatization. Acknowledging the embodiment in BEH of national champion, there is no surprise that privatizing the supply and/or transmission company sounds a reasonable solution. It is generally perceived that the state does not manage its assets with due diligence and thus privatization would result in higher economic benefits.

Listing half of the stocks of Bulgartransgaz on the Bulgarian Stock Exchange would introduce more transparency in terms of operating the transmission and storage and moreover and to some extent ensure non-discriminatory third-party access to network and storage facility, based on the aim of managing the company in its best business and economic interest. The approach in IGB where BEH holds half of the stock could be applied here too.

⁵¹⁵ *ibid*, 145.

⁵¹⁶ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 58.

However, the willingness of the state to give up the control over that TSO is questionable. Thus, taking into account the concerns raised in case the TSO remains integrated, Bulgaria could opt for recertifying Bulgartransgaz as an ISO.

With regard to Bulgargaz, given its role of a public supplier, I find it appropriate to point out that not until Bulgargaz loses its dominant position on the wholesale market, it shall not lose its role of public supplier. Moreover, the regulated part of the market shall not be directed into market-based pricing in order to protect the vulnerable customers. Therefore, currently I do not see any necessity of listing stocks of Bulgargaz.

(B) Strategic gas storage⁵¹⁷

With regard to strategic gas storage, experience could be drawn on from Poland, where every undertaking which is shipping natural gas to Poland or supplying customers with imported gas is obliged to keep strategic storage of gas equal the volume of natural gas shipped to the country by the undertaking for a certain period of time of its operation⁵¹⁸.

With regard to Bulgaria, the gas storage is not a service of public interest under the meaning of the Energy Act. Taking into account the technical specifics of the Chiren underground gas storage facility, that gas is only once injected in the summer and withdrawn in the winter, the storage is crucial for the suppliers acting on the market. Therefore, I find the storage important so that every player acting on the wholesale supply level shall be imposed with an obligation to envisage and keep certain volume in storage in order not only to manage the seasonal and daily climate fluctuations but to ensure security of supply for certain period. Moreover, I find that storage shall be a service of public interest among the other activities in the Energy Act.

Moreover, usually the prices of the gas are lower in the summer months when the gas is being injected in the Bulgarian storage facility. Thus said, when being withdrawn in the cold winter months when the gas prices are higher, this could potentially lead to a gas mix allowing certain reduction in the gas prices.

⁵¹⁷ Maria Mordwa, The obligation of strategic gas storage introduced in Poland as an example of a public service obligation relating to supply security: a question of compliance with European law, Yearbook of Antitrust and Regulatory Studies (Volume 4(4), 2011) 57 – 82 < https://yars.wz.uw.edu.pl/images/yars2011_4_4/Mordwa_The_Obligation_of_Strategic_Gas.pdf > accessed 4 January 2022.

⁵¹⁸ *ibid*, 60.

(C) Gas-to-gas competition⁵¹⁹

Gas-to-gas competition on the market is viewed as a tool contributing to lowering gas prices due to other supply alternatives. Thus, the IGB pipeline is a good starting point but interconnections with other neighbouring states are necessary to start operating in full capacity. Expansions of the transmission grid would create more capacity and thus allow new players to enter the market and compete with the Russian gas which is currently dominating the national market⁵²⁰. As observed by the Commission, new cross-border network infrastructure will allow the proper functioning of the internal gas market, enhance the security of supply through diversification of supply sources⁵²¹ and thus develop the market linkages.

Moreover, volumes in import portfolio could be increased by either spot deals or LNG, and therefore dependence on pipeline gas imported under long term contracts (LTCs) with ToP-clauses would be reduced. Besides mixing the import portfolio to secure supplies, NSI East Gas Corridor, listed as PCI, is a route that can bring gas from Austria to Bulgaria through Hungary and Romania or *vice versa* through the BRUA pipeline.

Thus said, long-term agreements shall be complemented by spot LNG agreements so that (i) on one hand, the former shall enhance investments in new routes and thus allow new supply sources while playing crucial role for stability and security of supply and (ii) on the other hand, the short- and mid-term spot LNG agreements would lead to flexibility and balance in seasonal demand fluctuations in order to prevent gas shortage⁵²² alongside with storage facilities.

Henceforth, a developed interconnection with the neighbouring countries would allow the development of the gas trading platforms in Bulgaria – the state-owned Balkan Gas Hub and the private Bulgarian Energy Trading Platform (both licensed by EWRC⁵²³). The planned infrastructure and the opportunity for new gas supplies shall

⁵¹⁹ Ivanova, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives (n 28), 58.

⁵²⁰ Nenova, Improving Energy Security: Curing the Bulgarian Gas Sector's inefficiencies (n 323), 50-51.

⁵²¹ European Commission, Long term infrastructure vision for Europe and beyond (n 443), 2.

⁵²² International Energy Agency, Security of Gas Supply in Open Markets, LNG and Power at a Turning Point (15 September 2004) ISBN 9789264108073 < <https://doi.org/10.1787/9789264108073-en> > accessed 16 October 2021, 105; European Commission, Long term infrastructure vision for Europe and beyond (n 443), 7.

⁵²³ EWRC, Natural Gas, Licenses (n 213), No 28 and 29.

enhance the gas trading in Bulgaria taking into account the geopolitical position of Bulgaria and turn it into an important factor on the gas map in the region.

(D) Increase in the rate of gas in energy mix

Natural gas being a flexible and efficient source of energy is an opportunity for Europe, including Bulgaria, as a way to the switch to renewable sources of energy⁵²⁴.

In the light of the European Green Deal⁵²⁵, the usage of natural gas for power generation is expected to increase in the future in the case of Bulgaria, particularly with the long expected in Brussels closure of the coal-fired power generators in Bulgaria and replacing coal with gas as envisaged by the current and non-final version of the National Recovery and Resilience Plan of the Republic of Bulgaria⁵²⁶. The plan envisages gas-fired power generator to be built which shall replace the coal-fired one and it shall be connected not only to the transmission network but to the IGB pipeline⁵²⁷. Therefore, in my view Bulgargaz would not lose its public supplier role easily in order not only to secure supply but also from national security perspective. However, while in 2021 such a project may have sounded an appropriate means of transition, in 2022 that is not the case since the Commission announced in December 2021 a legislative proposal for a shift from fossil natural gas to renewable low-carbon gases, namely biomethane and hydrogen⁵²⁸.

Having the tremendous issue of climate change on the agenda, gas is one the fastest ways to at least reduce carbon emissions. Bulgaria has to combine coal to gas transition and increase the levels of renewable source in order to reduce CO₂ emissions. This combination is evidently working in the case of United States⁵²⁹. Although the market size is incomparable, such an approach is applicable to Bulgaria.

⁵²⁴ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 21.

⁵²⁵ See further: European Commission, Strategy, Priorities 2019-2024, A European Green Deal < https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en > accessed 9 December 2021.

⁵²⁶ Министерски съвет на Република България, Следващо поколение Европейски съюз, Механизъм за възстановяване и устойчивост, Национален план за възстановяване и устойчивост на Република България (Версия 1.4, 15.10.2021) / Council of Ministers of Republic of Bulgaria, Next Generation EU, Recovery and Resilience Mechanism, National Recovery and Resilience Plan of the Republic of Bulgaria (15.10.2021, Version 1.4), *available only in Bulgarian* / <<https://www.nextgeneration.bg/14>> accessed 9 December 2021, 115.

⁵²⁷ *ibid.*

⁵²⁸ European Commission, Press corner, New EU framework to decarbonise gas markets, Press release IP/21/6682 Commission proposes new EU framework to decarbonise gas markets, promote hydrogen and reduce methane emissions (15 December 2021, Brussels) < https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6682 > accessed 9 January 2022.

⁵²⁹ Jones, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (n 10), 61.



Source: <http://scppa.org/page/prepaid>

Table of legislation, cases and other sources

(A) Table of legislation

EU Legislation

-Council Directive 91/296/EEC of 31 May 1991 on the transit of natural gas through grids, OJ L 147, 12.6.1991, 37-40

-Directive 98/30/EC of the European Parliament and of the Council of 22 June 1998 concerning common rules for the internal market in natural gas, OJ L204, 21.07.1998, 0001-0012

-Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC, OJ L 176, 15.07.2003, 57-78

-Council Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply, OJ L 127, 29.4.2004, 92-96

-Regulation (EC) No 1775/2005 of the European Parliament and of the Council of 28 September 2005 on conditions for access to the natural gas transmission networks, OJ L 289, 03.11.2005, 1-13

-Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, OJ L 211, 14.8.2009, 94-136

-Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005, OJ L 211, 14.8.2009, 36-54

-Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC Text with EEA relevance, OJ L 295, 12.11.2010, 1-22

-Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010, OJ L 280, 28.10.2017, 1 – 56

-Commission Delegated Regulation (EU) 2020/389 of 31 October 2019 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, C/2019/7772, OJ L 74, 11.3.2020, 1-19

National Legislation

- Закон за енергетиката (обн. ДВ, бр. 107/9.12.2003, изм. и доп., ДВ, бр. 74/08.09.2006, изм. и доп., ДВ, бр. 54/17.07.2012, изм. и доп., ДВ, бр. 17/06.03.2015, изм. и доп., ДВ, бр. 83/9.10.2018, изм. и доп., ДВ, бр. 41/21.05.2019); изм. и доп. повече от 50 пъти /Energy Act (publ. State Gazette No 107/9.12.2003, amended and supplemented, State Gazette 74/08.09.2006, amended and supplemented, State Gazette 54/17.07.2012, amended and supplemented, State Gazette 17/06.03.2015, amended and supplemented, State Gazette 83/09.10.2018, amended and

supplemented, State Gazette 41/21.05.2019) amended and supplemented more than 50 times < <https://lex.bg/laws/ldoc/2135475623> > accessed 14 January 2022

-Наредба № РД-07-5 от 16 май 2008 г. за условията и реда за отпускане на целева помощ за отопление, в сила от 27.05.2008 г., издадена от министъра на труда и социалната политика /Ordinance No РД-07-5 dated 16 May 2008 on the terms and conditions for granting targeted assistance for heating, in force from 27.05.2008, issued by the Minister for labour and social policy/ < <https://www.mlsp.government.bg/uploads/1/zakoni/naredba-za-otoplenie-28-06-2019.pdf> > accessed 22 December 2021

(B) Table of Cases

Cases of the CJEU

-C-27/76, *United Brands Company and United Brands Continentaal BV v Commission of the European Communities - Chiquita Bananas*, ECLI:EU:C:1978:22 [1978]

-C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG*, Opinion of AG Jacobs [1998] ECLI:EU:C:1998:264

-C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECLI:EU:C:1998:569

- Case C-265/08, *Federutility and Others v Autorità per l'energia elettrica e il gas* [2009] ECLI:EU:C:2009:640, Opinion of AG Ruiz-Jarabo Colomer

-Case C-265/08, *Federutility and Others v Autorità per l'energia elettrica e il gas*, ECLI:EU:C:2010:205

-Case C-198/12, *European Commission v Republic of Bulgaria*, ECLI:EU:C:2013:739, Opinion of AG Jääskinen

Cases of the European Commission

-Case AT.39402 *RWE gas foreclosure*

-Case AT.39816 *Upstream gas supplies in Central and Eastern Europe*

-Case AT.39849 *BEH Gas*

-Case M.5649 *RREEF FUND/ ENDESA/ UFG/ SAGGAS*

-Proposal for Commitments under Art. 9 of Council Regulation No 1/2003 in Case COMP/39.816 by Gazprom (14 February 2017), Non-confidential Version, Proposal

Commitments <

https://ec.europa.eu/competition/antitrust/cases/g2/gazprom_commitments.pdf

> accessed 8 October 2021

-Proposal for Commitments under Art. 9 of Council Regulation No 1/2003 in Case COMP/39.816 by Gazprom (15 March 2018), Non-confidential Version, Final Commitments <

https://ec.europa.eu/competition/antitrust/cases/dec_docs/39816/39816_9994_3.pdf > accessed 8 October 2021

Cases of the Commission for Protection of Competition

-Решение № 505/24.06.2008 г. на Комисия за защита на конкуренцията / Decision No 505 of 24.06.2008 of the Commission for protection of competition/ < <https://www.cpc.bg/ViewResult.aspx?type=Blob&id=2792> > accessed 12 November 2021

Cases of the Energy and Water Regulatory Commission

-Decision No. C-4 of 22.06.2015 of the Energy and Water Regulatory Commission on the Certification of Bulgartransgaz EAD as an Independent Transmission Operator of the gas transmission system in Bulgaria, in compliance with the requirements of Directive/2009/73/EC of the European Parliament and the Council of 13 July 2009 concerning the common rules for the internal market in natural gas and Regulation (EC) 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks /authentic text in Bulgarian/ < https://www.dker.bg/files/DOWNLOAD/res_c-4_en_15.pdf > accessed 20 October 2021

Cases of the National Assembly

-Решение за предприемане необходимите действия за приключване на дело СОМР/В1/АТ.39849 - БЕХ ГАЗ, прието на 24.11.2017 от Народно Събрание, обнародвано в ДВ, бр. 95/2017 г. /Decision regarding undertaking the necessary actions for conclusion of Case СОМР/В1/АТ.39849 – БЕХ GAS, adopted on 24.11.2017 from the National Assembly, publ. State Gazette 95/2017/*available only in Bulgarian*/

(C) European Commission Decisions

-Commission Decision of 11 June 1992 relating to a proceeding under Article 86 of the EEC Treaty (IV/34.174 – *Sealink/B&I – Holyhead*: interim measures) < https://ec.europa.eu/competition/antitrust/cases/dec_docs/34174/34174_2_2.pdf > accessed 28 December 2021

-Commission Decision of 18.03.2009 relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement, Case COMP/39.402 – *RWE Gas Foreclosure* (Brussels, 18.03.2009) < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39402/39402_576_1.pdf > accessed 28 December 2021

-Commission Decision of 21.10.2009 relating to a procedure in Merger Procedure under Art. 6(1)(b) of Regulation (EC) 139/004, Case COMP/M.5649 - *RREEF FUND/ ENDESA/ UFG/ SAGGAS* (Brussels, 21.10.2009) C(2009) 8321 <

https://ec.europa.eu/competition/mergers/cases/decisions/m5649_20091021_20310_en.pdf > accessed 9 January 2022

-Commission Decision of 4.5.2010 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement, Case COMP/39.317 – *E.ON Gas* (Brussels, 4.5.2010) C(2010) 2863 final < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39317/39317_1942_3.pdf > accessed 7 December 2021

-Commission Decision of 24.5.2018 under Art. 9 Regulation (EC) No 1/2003 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union (TFEU) and Article 54 of the EEA Agreement, Case AT.39816 – *Upstream Gas Supplies in Central and Eastern Europe*, C(2018) 3106 final (Brussels, 24.5.2018) Public version < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39816/39816_10148_3.pdf > accessed 9 October 2021

-Commission Decision of 25.7.2018 on the exemption of the Interconnector Greece-Bulgaria from the requirements regarding third party access, tariff regulation and ownership unbundling, C(2018) 5058 final (Brussels, 25.7.2018) < https://ec.europa.eu/energy/sites/ener/files/documents/2018_igb_decision_en.pdf > accessed 9 October 2021

-Commission Decision of 8.11.2018, State aid SA.51023 (2018/N) – Bulgaria and SA.52049 (2018/N) – Greece, State aid for the implementation of Gas Interconnector Greece-Bulgaria, C(2018) 7295 final (Brussels, 8.11.2018) Public version https://ec.europa.eu/competition/state_aid/cases/276000/276000_2047286_133_2.pdf > accessed 29 November 2021

-European Commission, Commission Decision of 17.12.2018 relating to proceedings under Article 102 of the Treaty on the Functioning of the European Union, AT.39849 – *BEH Gas* (Brussels, 17.12.2018), C(2018) 8806 final, Public version < https://ec.europa.eu/competition/antitrust/cases/dec_docs/39849/39849_2692_4.pdf > accessed 3 December 2021

(D) European Commission Documents and Staff Working Documents

-Commission of the European Communities, New Community Energy Objectives, Communication from the Commission to the Council, COM(85) 245 final, (28 May 1985)

-Commission of the European Communities, The Internal Energy Market, Commission Working Document (Brussels, 2 May 1988) COM(88) 238 final < <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:51988DC0238&from=EN> > accessed 18 December 2021

-Commission of the European Communities, Opening Up To Choice Launching the single European gas market, 2000 < <https://op.europa.eu/en/publication-detail/-/publication/a9ec7a03-668a-44b4-8a16-286cb74497c3/language-en/format-PDF/source-search> > accessed 5 September 2021

- Commission of the European Communities, Communication from the Commission to the Council and the European Parliament, Prospects for the internal gas and electricity market (Brussels, 10.1.2007) COM(2006) 841 final
- Commission of the European Communities, Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (Final Report), 10.1.2007, COM(2006) 851 final
- Commission of the European Communities, Commission Staff Working Document on tariffs for access to the natural gas transmission networks regulated under Article 3 of Regulation 1775/2005 (Brussels, 20.4.2007), SEC(2007) 535
- Commission of the European Communities, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Second Strategic Energy Review, An EU Energy Security and Solidarity Action Plan, COM(2008) 781 final (Brussels, 13.11.2008) < <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0781:FIN:EN:PDF> >
- accessed 14 October 2021
- Commission of the European Communities, Commission staff working document on Article 22 of Directive 2003/55/EC concerning common rules for the internal market in natural gas and Article 7 of Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity – New Infrastructure Exemptions –, SEC (2009) 642 final
- Commission of the European Communities, DG Competition Report on Energy Sector Inquiry, Commission Staff Working Document accompanying the Communication from the Commission Inquiry pursuant to Article 17 of Regulation (EC) No 1/2003 into the European gas and electricity sectors (Final Report) (Brussels, 10 January 2007), SEC(2006) 1724
- European Commission, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, The Unbundling Regime (Brussels, 22 January 2010)
- European Commission, Commission Staff Working Paper, Interpretative Note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas, The Regulatory Authorities (Brussels, 22 January 2010)
- European Commission, Commission Staff Working Paper on certification of Transmission System Operators of networks for electricity and natural gas in the European Union, SEC(2011) 1095 final (Brussels, 21.9.2021)
- European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Long term infrastructure vision for Europe and beyond, COM(2013) 711 final (Brussels, 14.10.2013)
- European Commission, Energy Roadmap 2050, COM(2011) 885 final (15 December 2011) <

https://ec.europa.eu/energy/sites/ener/files/documents/2012_energy_roadmap_2050_en_0.pdf > accessed 22 July 2021

-European Commission, Commission Staff Working Document, In-depth study of European Energy Security Accompanying the document Communication from the Commission to the Council and the European Parliament: European energy security strategy (Brussels, 2.7.2014) SWD (2014) 330 final/3 < https://ec.europa.eu/energy/sites/ener/files/documents/20140528_energy_security_study.pdf > accessed 12 October 2021

-European Commission, Annex to Commission Delegated Regulation amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, (Brussels, 19.11.2021) C(2021) 8409 final < https://ec.europa.eu/energy/sites/default/files/fifth_pci_list_19_november_2021_annex.pdf > accessed 29 November 2021

-Note of DG Energy & Transport on Directive 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas The unbundling regime (16.01.2004)

(E) Notices, Opinions, Proposals, etc. of the European Commission

-Commission of the European Communities, Communication from the Commission to the Council and European Parliament, Completing the internal energy market, Proposal for a Directive of the European Parliament and the Council amending Directives 96/92/EC and 98/30/EC concerning common rules for the internal market in electricity and natural gas, Proposal for a Regulation of the European Parliament and of the Council on conditions for access to the network for cross-border exchanges in electricity, COM(2001) 125 final (Brussels, 13.3.2001) < <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0125:FIN:EN:PDF> > accessed 31 October 2021

-Commission of the European Communities, Proposal for a Directive of the European Parliament and of the Council amending Directive 2009/73/EC concerning common rules for the internal market in natural gas (Brussels, 19.9.2007) COM (2007) 529 final

-Notice on the application of the competition rules to access agreements in the telecommunications sector, Framework, Relevant Markets and Principles, OJ C 265, 22.8.1988, 2-28

-Notification of the Government of the Republic of Bulgaria pursuant to Article 10(2) of Directive 2009/73/EC of the European Parliament and the Council ('Gas Directive') concerning common rules for the internal market in natural gas regarding the designation of Bulgartransgaz EAD as a transmission system operator in the Republic of Bulgaria, OJ C 248, 19.12.2015, 10

-European Commission, Proposal for a Regulation of the European Parliament And of the Council concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (Brussels, 16.2.2016) COM(2016) 52 final 2016/0030 (COD) < https://eur-lex.europa.eu/resource.html?uri=cellar:33516200-d4a2-11e5-a4b5-01aa75ed71a1.0018.02/DOC_1&format=PDF > accessed 7 December 2021

(F) Speeches

-Andris Piebalgs, Energy Commissioner, "Gas goes global – Sellers or Buyers market?", Speech at the World Gas Conference, 9 June 2006, SPEECH/06/364 < https://ec.europa.eu/commission/presscorner/detail/en/speech_06_364 > accessed 22 August 2021

-Neelie Kroes, European Commissioner for Competition Policy, Introductory remarks on Final Report of Energy Sector Competition Inquiry, Press Conference, 10 January 2007, SPEECH/07/4 < https://ec.europa.eu/commission/presscorner/detail/en/speech_07_4 > accessed 22 August 2021

-Günther H. Oettinger, European Commissioner for Energy, Power market challenges and the European Energy Security Strategy, Union of the Electricity Industry (Eurelectric) Annual Convention, SPEECH/14/443 (London, 3 June 2014) < https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_14_443 > accessed 11 October 2021

(G) Press releases of the European Commission

-European Commission, Press corner, Energising Europe: A real market with secure supply MEMO/07/372 (Brussels, 19 September 2007) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_07_361 > accessed 25 October 2021

-European Commission, Press corner, Antitrust: Commission confirms unannounced inspections in the natural gas sector MEMO/11/641 (Brussels, 27 September 2011) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_11_641 > accessed 8 October 2021

-European Commission, Press corner, Press release Antitrust: Commission opens proceedings against Gazprom, IP/12/937 (Brussels, 4 September 2012) < https://ec.europa.eu/commission/presscorner/detail/en/IP_12_937 > accessed 8 October 2021, IP/12/937 (Brussels, 4 September 2012) < https://ec.europa.eu/commission/presscorner/detail/en/IP_12_937 > accessed 8 October 2021

-European Commission, Press corner, Press release, Antitrust: Commission opens proceedings against Bulgarian Energy Holding and its subsidiaries Bulgargaz and Bulgartransgaz, IP/13/656 (Brussels, 5 July 2013) < https://ec.europa.eu/commission/presscorner/detail/en/IP_13_656 > accessed 5 December 2021

-European Commission, Press Corner, Press release, Antitrust: Commission sends Statement of Objections to Gazprom for alleged abuse of dominance on Central and Eastern European gas supply markets, IP/15/4828 (Brussels, 22 April 2015) < https://ec.europa.eu/commission/presscorner/detail/en/IP_15_4828 > accessed 8 October 2021

-European Commission, Press corner, Antitrust: Commission sends Statement of Objections to Gazprom - Factsheet, MEMO/15/4829 (Brussels, 22 April 2015) <

https://ec.europa.eu/commission/presscorner/detail/en/MEMO_15_4829 > accessed 8 October 2021

-European Commission, Press corner, EU Liquified Natural Gas and gas storage strategy, MEMO/16/310 (Brussels, 16 February 2016) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_16_310 > accessed 13 October 2021

-European Commission, Press corner, Press Release IP/17/555 (Brussels, 13 March 2017) < https://ec.europa.eu/commission/presscorner/detail/en/IP_17_555 > accessed 8 October 2021

-European Commission, Press corner, MEMO/17/546, Fact Sheet – Bulgaria (Brussels, 13 March 2017) < https://ec.europa.eu/commission/presscorner/detail/en/MEMO_17_546 > accessed 9 October 2021

- European Commission, Press corner, Press release, Antitrust: Commission imposes binding obligations on Gazprom to enable free flow of gas at competitive prices in Central and Eastern European gas markets, IP/18/3921 (Brussels, 24 May 2018) < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_3921 > accessed 9 October 2021

-European Commission, Press corner, State aid: Commission approves public support for natural gas interconnector between Greece and Bulgaria, IP/18/6342 (8 November 2018) < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_6342 > accessed 29 November 2021

-European Commission, Press corner, Press release Antitrust: Commission fines BEH Group € 77 million for blocking access to key natural gas infrastructure in Bulgaria, IP/18/6846 (Brussels, 17 December 2018) < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_6846 > accessed 5 December 2021

-European Commission, Press corner, Press release Internal energy market: national legislation in 8 Member States still not in line with EU rules, IP/12/181 (27 February 2021) < https://ec.europa.eu/commission/presscorner/detail/en/IP_12_181 > accessed 14 November 2021

-European Commission, Press corner, New EU framework to decarbonise gas markets, Press release IP/21/6682 Commission proposes new EU framework to decarbonise gas markets, promote hydrogen and reduce methane emissions (15 December 2021, Brussels) < https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6682 > accessed 9 January 2022

(H) Other sources

-Balkan Gas Hub, About us, About The Company < <https://www.balkangashub.bg/en/about-us/company> > accessed 29 November 2021

-Balkan Gas Hub, Products and Services, GRP Segment < <https://www.balkangashub.bg/en/products/grp> > accessed 29 November 2021

- Bulgargaz, About, Finance Results, Financial Statements 2020, Annual management report. Annual financial statements. Independent auditor`s report of December 31st 2020 < <https://www.bulgargaz.bg/upload/editorfiles/files/gfo2020.pdf> > accessed 4 January 2022
- Bulgargaz AD, About, Licenses < <https://www.bulgargaz.bg/en/about-us/licenses-37> > accessed 14 November 2021
- Bulgargaz AD, About, Profile < <https://www.bulgargaz.bg/en/about-us/profile-24> > accessed 14 November 2021
- Bulgargaz, News, Press release (01.09.2021) < <https://www.bulgargaz.bg/en/news/336> > accessed 15 October 2021
- Bulgarian Energy Holding, About BEH, History < <https://bgenh.com/en/page/40/History.html> > accessed 3 October 2021
- Bulgargaz, About, Profile < <https://www.bulgargaz.bg/en/about-us/profile-24> > accessed 3 October 2021
- Bulgarian Energy Holding, Projects, South Stream < <https://bgenh.com/en/page/44/South-Stream.html> > accessed 9 October 2021
- Bulgarian Energy Holding, Investors, Financial reports, 2020, Annual financial reports as at 31.12.2020, Annual financial report – consolidated < <https://bgenh.com/storage/app/public/uploads/files/finans/2020/31.12/FSconsBEH2020ENaud.pdf> > accessed 11 October 2021
- Bulgartransgaz EAD, About us < <https://www.bulgartransgaz.bg/en/pages/about-us-1.html> > accessed 3 October 2021
- Bulgartransgaz EAD, About us, History and experience < <https://www.bulgartransgaz.bg/en/pages/company-history-9.html> > accessed 14 January 2022
- Bulgartransgaz, Business development, PCI, 6.8.3. Gas Interconnection Bulgaria – Serbia (IBS) < <https://www.bulgartransgaz.bg/en/pages/6-8-3-mezhdusistemna-gazova-vrazka-balgariya-sarbiya-ibs-191.html> > accessed 12 January 2022
- Bulgartransgaz, Business development, TEN-YEAR NETWORK DEVELOPMENT PLANS OF "BULGARTRANSGAZ" EAD, 2020 - 2029 Ten-Year Network Development Plan of Bulgartransgaz EAD, approved by the Company Management Board by Protocol № 430/18.03.2020, approved by the EWRC with Decision № ДПІРМ-1 dated 30.07.2020 < <https://www.bulgartransgaz.bg/files/useruploads/files/amd/TYNDP%202020-2029%20EN.pdf> > accessed 2 January 2022
- Bulgartransgaz, Business development, TEN-YEAR NETWORK DEVELOPMENT PLANS OF "BULGARTRANSGAZ" EAD, 2021 - 2030 Ten-Year Network Development Plan of Bulgartransgaz EAD, approved by the Company Management Board by Protocol № 516/11.03.2021, submitted for approval to the Energy and Water Regulatory Commission by Application Incoming No. E-15-45-19 of 13.04.2021 < <https://www.bulgartransgaz.bg/files/useruploads/files/amd/TYNDP%202021%20-%202030%20EN.pdf> > accessed 3 January 2022

- Bulgartransgaz, Customer Zone, Gas infrastructure description < <https://www.bulgartransgaz.bg/en/pages/gaz-infra-54.html> > accessed 15 November 2021
- Bulgartransgaz, News, Information from Bulgartransgaz EAD on the Decision of the European Commission under Case AT. 39849 BEH-Gas < <https://www.bulgartransgaz.bg/en/news/information-from-bulgartransgaz-ead-on-the-decision-of-the-european-commission-under-case-at-39849-beh-gas-451.html> > accessed 6 December 2021
- Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, State Energy and Water Regulatory Commission (SEWRC), National Report to the European Commission, July 2009 < https://www.dker.bg/PDOCS/rep_sewrc_09_en.pdf > accessed 23 December 2021
- Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, Annual Report to the European Commission, July 2018 < <https://www.dker.bg/PDOCS/ann-rep-ewrc-to-ec-2018.pdf> > accessed 18 November 2021
- Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, Annual Report to the European Commission, July 2020 < https://www.dker.bg/uploads/2020/report_EC_2020_EN.pdf > accessed 11 October 2021
- Energy and water regulatory commission (EWRC), About EWRC, Reports to the European Commission, Annual Report to the European Commission, July 2021 < <https://www.dker.bg/uploads/2021/annual-rep-ec-jul2021.pdf> > accessed 15 October 2021
- European Commission, Energy, Topics, Energy Security, Diversification of gas supply sources and routes < https://ec.europa.eu/energy/topics/energy-security/diversification-of-gas-supply-sources-and-routes_en > accessed 13 October 2021
- European Commission, Energy, Topics, Energy strategy, Energy Union < https://ec.europa.eu/energy/topics/energy-strategy/energy-union_en > accessed 27 November 2021
- European Commission, European Neighbourhood Policy and Enlargement Negotiations, Enlargement, Negotiations status < https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/negotiations-status_en > accessed 6 January 2022
- European Commission, Strategy, Priorities 2019-2024, A European Green Deal < https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en > accessed 9 December 2021
- European Court of Auditors, Improving the security of energy supply by developing the internal energy market: more efforts needed, Special Report No 16 (2015) < https://www.eca.europa.eu/Lists/ECADocuments/SR15_16/SR_ENERGY_SECURITY-EN.pdf > accessed 28 November 2021

- European Network of Transmission System Operators for Gas (ENTSO-G), Network Codes and Guidelines < <https://www.entsog.eu/network-codes-and-guidelines> > accessed 27 November 2021
- European Network of Transmission System Operators for Gas (ENTSO-G), Network Codes and Guidelines, Interoperability and Data Exchange NC < <https://www.entsog.eu/interoperability-and-data-exchange-nc> > accessed 9 October 2021
- Gastrade, News and Press releases, Participation of Bulgartransgaz in the Alexandroupolis LNG Terminal < <http://www.gastrade.gr/en/the-company/news-press-releases/participation-of-bulgartransgaz-in-the-alexandroupolis-lng-terminal.aspx> > accessed 2 January 2022
- Gastrade, The Company, The Project < <http://www.gastrade.gr/en/the-company/the-project.aspx> > accessed 30 October 2021
- Ministry of Energy, Bulletin for the condition and development of the energy sector of the Republic of Bulgaria in 2020 < https://www.me.government.bg/uploads/manager/source/VOP/Buletin_Energy2020.pdf > accessed 3 October 2021
- Ministry of Energy, Gas Interconnection Bulgaria - Serbia (IBS) < <https://www.me.government.bg/en/themes/gas-interconnection-bulgaria-serbia-ibs-912-0.html> > accessed 6 January 2022
- Ministry of Energy, News, Highlights, Vertical Gas Corridor completely corresponds to the EU aim to achieve energy security and diversification (24 April 2015) < <https://www.me.government.bg/en/news/vertical-gas-corridor-completely-corresponds-to-the-eu-aim-to-achieve-energy-security-and-diversification-2015.html?p=eyJ0eXBlljoiaG90bmV3cyIsInBhZ2UiOjd9> > accessed 8 January 2022
- Republic of Bulgaria, Energy and water regulatory commission (EWRC), About EWRC < <https://www.dker.bg/en/about-ewrc.html> > accessed 3 October 2021
- ICGB, About, IGB Project < https://www.icgb.eu/about/igb_project > accessed 9 October 2021
- ICGB, Gas companies from Bulgaria, Greece, Romania and Hungary signed a memorandum of understanding on the vertical gas corridor (19.07.2017) < <https://www.icgb.eu/gas-companies-signed-memorandum-of-understanding-on-the-vertical-gas-corridor> > accessed 8 January 2022
- ICGB, IGB's status update was discussed at the 7th Ministerial Meeting of the Southern Gas Corridor Advisory Council (11.02.2021) < <https://www.icgb.eu/igbs-status-update-was-discussed-at-the-7th-ministerial-meeting-of-the-southern-gas-corridor-advisory-council> > accessed 8 January 2022
- Investopedia, Commodity Swap < <https://www.investopedia.com/terms/c/commodityswap.asp> > accessed 9 October 2021
- Eurostat, Energy imports dependency, Natural gas < https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_ID_custom_1727207/default/table?lang=en > accessed 8 December 2021

- Eurostat, Glossary: Energy dependency rate < https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Energy_dependency_rate > accessed 11 October 2021
- Eurostat, Supply, transformation and consumption of gas < https://ec.europa.eu/eurostat/databrowser/view/NRG_CB_GAS_custom_1641647/default/table?lang=en > accessed 24 November 2021
- Eurostat, Inability to keep home adequately warm, EU-SILC survey < https://ec.europa.eu/eurostat/databrowser/view/ILC_MDES01_custom_137816/bookmark/table?lang=en&bookmarkId=f4f90944-6627-4c6b-8035-f966532e2036 > accessed 4 November 2021
- Eurostat, Natural gas supply statistics < https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Natural_gas_supply_statistics > accessed 11 October 2021
- Southern Gas Corridor, About us < <https://www.sgc.az/en/about> > accessed 14 October 2021
- The State Oil Company of the Azerbaijan Republic (SOCAR), Company, About SOCAR, Discover SOCAR < <https://socar.az/socar/en/company/about-socar/discover-socar> > accessed 15 October 2021
- Булгаргаз, Новини, Прессъобщение във връзка с доставките на природен газ от Азербайджан /Bulgargaz, News, Press release regarding the natural gas supplies from Azerbaijan (01.01.2022) *available only in Bulgarian*/ < <https://www.bulgargaz.bg/bg/novini/362> > accessed 14 January 2022
- Булгаргаз, Новини, Прессъобщение относно продажна цена на газа за декември 2021 (01.12.2021) /Bulgargaz, News, Press release regarding the gas selling price for December 2021 (01.12.2021) *available only in Bulgarian*/ < <https://www.bulgargaz.bg/bg/novini/355> > accessed 7 December 2021
- Булгаргаз, Новини, Прессъобщение (01.01.2021) /Bulgargaz, News, Press release (01.01.2021) *available only in Bulgarian*/ < <https://www.bulgargaz.bg/bg/novini/292> > accessed 2 January 2022
- Булгаргаз, Новини, Прессъобщение относно продажна цена на газа за януари 2022 г. (01.01.2022) /Bulgargaz, News, Press release regarding the natural gas selling price for January 2022 (01.01.2022) *available only in Bulgaria*/ < <https://www.bulgargaz.bg/bg/novini/361> > accessed 2 January 2022
- Комисия за енергийно и водно регулиране, Природен газ, Лицензии / Energy and water regulatory commission (EWRC), Natural Gas, Licenses/ *available only in Bulgarian* < <https://www.dker.bg/uploads/2021/spravka-lic-pg-oct2021.pdf> > accessed 30 October 2021
- Комисия за енергийно и водно регулиране, Природен газ, Пренос и съхранение / Energy and water regulatory commission (EWRC), Natural Gas, Transmission and storage/ *available only in Bulgarian* < <https://www.dker.bg/bg/priroden-gaz/prenos-2.html> > accessed 20 October 2021
- Комисия за енергийно и водно регулиране, Природен газ, Разпределение и снабдяване от краен снабдител /Energy and Water Regulatory Commission, Natural Gas, Distribution and Supply by End Supplier/ *available only in Bulgarian* <

<https://www.dker.bg/bg/priroden-gaz/razpredelenie-i-snabdyavane-ot-kraen-snabditel.html> > accessed 12 January 2022

-Министерски съвет на Република България, Следващо поколение Европейски съюз, Механизъм за възстановяване и устойчивост, Национален план за възстановяване и устойчивост на Република България (Версия 1.4, 15.10.2021) /Council of Ministers of Republic of Bulgaria, Next Generation EU, Recovery and Resilience Mechanism, National Recovery and Resilience Plan of the Republic of Bulgaria (15.10.2021, Version 1.4), *available only in Bulgarian/* <<https://www.nextgeneration.bg/14>> accessed 9 December 2021, 115

-Министерство на енергетиката, Новини, Акценти, Т. Петкова: Договорът за доставка на газ от Шах Дениз 2 има ключово значение за нашите енергийни приоритети /Ministry of Energy, News, Highlights, T. Petkova: Gas supply agreement from Shah Deniz 2 has key importance for our energy priorities *available only in Bulgarian/* < <https://www.me.government.bg/news/t-petkova-dogovorata-dostavka-na-gaz-ot-shah-deniz-2-ima-klyuchovo-znachenie-za-nashite-energiini-prioriteti-2657.html?p=eyJ0eXBlljoiaG90bmV3cyIsInBhZ2UiOjV9> > accessed 15 October.

Bibliography

(A) Encyclopedias

-Ruseva-Savova Z, Bulgaria, in Kurt Deketelaere (ed.), IEL Energy Law, (Kluwer Law International BV, Netherlands, 2016), <
<https://kluwerlawonline.com/EncyclopediaChapter/IEL+Energy+Law/ENER20190004> > accessed 2 October 2021

(B) Books

-Demir O, Liberalisation of Natural Gas Markets Potential and Challenges of Integrating Turkey into the EU Market, The Political Economy of the Middle East (Palgrave Macmillan, Singapore, 2020) ISBN 978-981-15-2027-3 (eBook)
<https://doi.org/10.1007/978-981-15-2027-3>

-Dralle T M, Ownership Unbundling and Related Measures in the EU Energy Sector Foundations, the Impact of WTO Law and Investment Protection, European Yearbook of International Economic Law, EYIEL Monographs - Studies in European and International Economic Law Volume 5 (2018, Springer International Publishing AG) ISBN 978-3-319-77796-2 ISBN 978-3-319-77797-9 (eBook) <
<https://doi.org/10.1007/978-3-319-77797-9> >

-International Energy Agency, Security of Gas Supply in Open Markets, LNG and Power at a Turning Point (15 September 2004) ISBN 9789264108073 <
<https://doi.org/10.1787/9789264108073-en> > accessed 16 October 2021

-Jones C, EU Energy Law Volume I The Internal Energy Market (Claeys & Casteels Publishing, 2016, 4th Edition) ISBN 9789491673436, <<https://search-ebSCOhost-com.uaccess.univie.ac.at/login.aspx?direct=true&db=nlebk&AN=1503982&site=ehost-live> > accessed 17 October 2021

-Jones C, EU Energy Law Volume I The Internal Energy Market (Claeys & Casteels Publishing, 2021, 5th Edition) ISBN 9789077644669 (ePDF)

-Jones C, EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union (Edward Elgar Publishing, 1st edition, 2017) ISBN 9789077644447 < <https://search-ebSCOhost-com.uaccess.univie.ac.at/login.aspx?direct=true&db=nlebk&AN=1826928&site=ehost-live> > accessed 17 October 2021

-Jones C, EU Energy Law Volume II: EU Competition Law and Energy Markets (Claeys & Casteels, 5th edition [S.I.], 2019) ISBN ebook: 9789077644683

-Jonston A, Block G, EU Energy Law (Oxford University Press, 1st Edition, 2012) ISBN 978-0-19-966524-2

-Kopp S D, Politics, Markets and EU Gas Supply Security Case Studies of the UK and Germany, Energy Policy and Climate Protection (Springer Fachmedien Wiesbaden 2015) ISBN 978-3-658-08324-3 (eBook),

-McConville M, Chui W H (eds.), Research Methods for Law (Edinburgh University Press, 2007) ISBN 9780748633586

- Ming-Zhi Gao A, *Regulating Gas Liberalisation A Comparative Study on Unbundling and Open Access Regime in the US, Europe, Japan, South Korea and Taiwan, Energy and Environmental Law & Policy Series Supranational and Comparative Aspects, Volume 14* (Kluwer Law International, 2010) web-ISBN 978-90-411-4808-7 <
<https://wkldigitalbooks.integra.co.in/Customer/Home/BookDetails?TitleGUID=24849264-C098-4267-B7C0-A9E28D519E30> > accessed 1 August 2021
- Mulder M, *Regulation of Energy Markets, Economic Mechanisms and Policy Evaluation, Lecture Notes in Energy, Volume 80*, ISBN 978-3-030-58319-4 (eBook) <
<https://doi.org/10.1007/978-3-030-58319-4> > accessed
- Nies S, Delors J, *The European Energy Transition: Actors, Factors, Sectors, European Energy Studies Volume 14* (Claeys & Casteels Law Publisher, 2019), ISBN E-book 9789077644591
- Schröder M, *EU Gas Supply Security, A Political Vision of the Southern Gas Corridor, Studies on the European Union Series, Volume 16, (1st edition, 2019, Nomos Verlagsgesellschaft mbH & Co. KG)*, ISBN online: 978-3-7489-0029-0 <
<https://doi.org/10.5771/9783748900290> > accessed 27 July 2021
- Sioshansi (Eds.) F P, *Competitive Electricity Markets: Design, Implementation, Performance* (First edition 2008, Elsevier) ISBN: 978-0-08-047172-3
- Talus K, *Vertical Natural Gas Transportation Capacity, Upstream Commodity Contracts and EU Competition Law* (Kluwer Law International BV, The Netherlands, 2011) web-ISBN 978-90-411-5123-0
- Talus K, *EU Energy Law and Policy: A Critical Account* (Oxford University Press, 2013) ISBN 9780199686391
- Talus K, *Introduction to EU Energy Law* (Oxford University Press, 2016) ISBN 978-0-19-879181-2 (hbk.), ISBN 978-0-19-879182-9 (pbk.)
- Van Bael I, Bellis J F, *Competition Law of the European Union* (Kluwer Law International, 6th Edition, 2021) ISBN 9789041153982
- Welsch M (eds.), *Europe's Energy Transition Insights for Policy Making* (Academic Press, 2017) ISBN 9780128098066 < <https://doi.org/10.1016/B978-0-12-809806-6.00011-0>. ;
<https://www.sciencedirect.com/science/article/pii/B9780128098066000110> >
 accessed 13 October 2021
- Richard W, Bailey D, *Competition Law* (Oxford University Press, Seventh Edition, 2012) ISBN 978-0-19-958655-4
- Whish R, Bailey D, *Competition Law* (Oxford University Press, Ninth Edition, 2018) ISBN 978-0-19-877906-3

(C) Articles, Master Thesis, Papers, Reports

- Armstrong M and Sappington D E M, *Regulation, Competition and Liberalization*, *Journal of Economic Literature*, Vol. 44, Issue No. 2 (Jun., 2006), 325 – 366 <
<https://www.jstor.org/stable/30032251> > accessed 3 October 2021

- Bowden J, SE Europe gas markets: towards integration, Oxford Institute for Energy Studies, October 2019, OIES Paper: NG150 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2019/10/SE-Europe-gas-markets-towards-integration-NG-150.pdf?v=11aedd0e4327> > accessed 22 July 2021
- Boersma T, The challenge of completing the EU internal market for natural gas, Sieps – Swedish Institute for European Policy Studies, European Policy Analysis 2015:27, November < <https://www.sieps.se/en/publications/2015/the-challenge-of-completing-the-eu-internal-market-for-natural-gas-201527epa/> > accessed 24 July 2021
- Brakman S, van Marrewijk C, van Witteloostuijn A, Market Liberalization in the European Natural Gas Market The Importance of Capacity Constraints and Efficiency Differences, (CESIFO working paper No. 2697, July 2009) < <https://www.cesifo.org/en/publikationen/2009/working-paper/market-liberalization-european-natural-gas-market-importance> > accessed 18 July 2021
- Buschle D, Unbundling of State-owned Transmission System Operators – Effective Remedy or Eyewash?, European Networks Law & Regulation Quarterly, Volume 1, Issue 1 (2013), 49 – 64 <<https://www.proquest.com/openview/6b355c7b24621fd03ac5d4b34d67cb41/1?pq-origsite=gscholar&cbl=2035947> > accessed 8 October 2021
- Cavaliere A, The Liberalization of Natural Gas Markets: Regulatory Reform and Competition Failures in Italy, Oxford Institute for Energy Studies, May 2007, OIES Paper: NG 20 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG20-TheLiberlizationofNaturalGasMarketsRegulatoryReformAnCompetitionFailuresInItaly-AlbertoCavaliere-2007.pdf> > accessed 25 July 2021
- Center for the Study of Democracy, Good Governance and Energy Security in Bulgaria, Policy Tracker: EU and Russia’s Energy Policy at the Backdrop of the South Stream Pipeline (2014) < <https://www.cceol.com/search/gray-literature-detail?id=510998> > accessed 2 December 2021
- Chyong C K, An Assessment of Gazprom’s Proposed Commitments Concerning Central and Eastern European Gas Markets Using a Global Gas Market Simulation Model, Energy Policy Research Group, University of Cambridge, May 2017, Comments to the European Commission, Directorate General for Competition in response to the antitrust case AT.39816 — Upstream gas supplies in central and eastern Europe < https://www.eprg.group.cam.ac.uk/wp-content/uploads/2017/05/An-Assessment-of-Gazproms-commitments_CHYONG.pdf > accessed 30 July 2021
- Conte F, Irlam F, Horses for Courses? Cross-Country Comparison of European Gas Market Liberalisation (June 2005) < <https://www.slideshare.net/FrancescaConte/crosscountry-comparison-of-european-gas-market-liberalization> > accessed 9 September 2021
- Corbeau A S, Volk D, Sinton J, Jiang J, Ping J, Teng T, Boshu L and Fen Y, Gas Pricing and Regulation China’s Challenges and IEA Experience, (OECD/IEA, 2012)

- Cottier T, Matteotti-Berkutova S, Nartova O, Third Country Relations in EU Unbundling of Natural Gas Markets: The “Gazprom Clause” of Directive 2009/73 EC and WTO Law, World Trade Institute, NCCR Trade Regulation Working Paper No. 2010/06 (5 May 2010) < https://www.wti.org/media/filer_public/96/9b/969b5456-820f-4077-a716-67576d322ca9/access_to_gasgrids.pdf > accessed 23 October 2021
- Council of European Energy Regulators (CEER), CEER Status Review Status Review on the Implementation of Transmission System Operators’ Unbundling Provisions of the 3rd Energy Package, Ref: C15-LTF-43-04 (1 April 2016, Update on 28 April 2016)
- Creti A, Villeneuve B, Longterm Contracts and Take-or-Pay Clauses in Natural Gas Markets, Energy Studies Review (Volume 13, Issue 1, 2004) 75-94 < <https://energystudiesreview.ca/esr/article/view/466> > accessed 10 November 2021
- de Hauteclocque A, Glachant J M, Long-term energy supply contracts in European competition policy: Fuzzy not crazy, Energy Policy, Volume 37, Issue 12, (2009), 5399-5407, ISSN 0301-4215 < <https://doi.org/10.1016/j.enpol.2009.07.054> > accessed 7 October 2021
- de Suzzoni P, Are regulated prices against the market, European Review of Energy Markets, Volume 3, Issue 3 (October 2009) < <https://eeinstitute.org/european-review-of-energy-market/EREM-9-Article-Patricia-de-Suzzoni.pdf> > accessed 2 November 2021
- Diathessopoulos M D, Competition Law and Sector Regulation in the European Energy Market after the Third Energy Package: Hierarchy and Efficiency (March 20, 2012). University of Cambridge Faculty of Law Research Paper < <https://ssrn.com/abstract=2026607> > accessed 18 July 2021
- Dreyer I, Erixon F, and Winkler R, Research Report The quest for gas market competition fighting Europe's dependency on Russian gas more effectively, (2010) ECIPE Occasional Paper, No. 1/2010, European Centre for International Political Economy (ECIPE) < <https://www.econstor.eu/bitstream/10419/174707/1/ecipe-op-2010-1.pdf> > accessed 31 July 2021
- Egenhofer C, Gialoglou K, Rethinking the EU Regulatory Strategy for the Internal Energy Market, CEPS Task Force Report No. 52 (December 2004) < <https://www.ceps.eu/ceps-publications/rethinking-eu-regulatory-strategy-internal-energy-market/> > accessed 4 October 2021
- Egging E, Gabriel S A, Holz F, Zhuang J, A complementarity model for the European natural gas market, Energy Policy, Volume 36, Issue 7, 2008, Pages 2385-2414, ISSN 0301-4215, < <https://doi.org/10.1016/j.enpol.2008.01.044> ; <https://www.sciencedirect.com/science/article/pii/S030142150800061X> > accessed 18 July 2021
- Evrard S. J., Essential Facilities in the European Union: Bronner and beyond, Columbia Journal of European Law (Volume 10, Issue 3, 1 March 2004) < <https://www.jonesday.com/files/Publication/e2d79ea9-8440-49e6-a879-c834f4b0b557/Presentation/PublicationAttachment/9cf89b02-295b-43cf-8a00-3cbea13a85bf/Article%20essential%20facilities.pdf> > accessed 24 December 2021
- European Commission, Directorate-General for Energy, Quo Vadis EU gas market regulatory framework - Study on gas market design for Europe (Luxembourg,

- Publications Office of the European Union, 2018) < https://ec.europa.eu/energy/sites/ener/files/documents/quo_vadis_report_16feb18.pdf > accessed 22 December 2021
- Faella G, Merlino P, Strategic Underinvestment as an Abuse of Dominance under EU Competition Rules, (2013), *World Competition*, Volume 36, Issue 4, 513-539 < <https://kluwerlawonline.com/journalarticle/World+Competition/36.4/WOCO2013040> > accessed 7 October 2021
- Felsmann, B., Vékony, A., Dézsi, B., & Diallo, A., European Barriers in Retail Energy Markets Project: Bulgaria Country Handbook (Luxembourg, 2021, Publications Office of the European Union) ISBN 978-92-76-30248-3, < http://publications.europa.eu/resource/cellar/63383d85-71a3-11eb-9ac9-01aa75ed71a1.0001.01/DOC_1 >
- Finon D, French gas industry in transition : Breach in the public service model, Institut d'économie et de politique de l'énergie (August 2001) < <https://inis.iaea.org/collection/NCLCollectionStore/Public/34/056/34056192.pdf?r=1&r=1> > accessed 9 November 2021
- Ivanova E, Recent Developments in the Natural Gas Market Liberalization in Bulgaria – analyzing the inconsistencies with the EU policy objectives, (2012) Master Thesis submitted to Central European University, Budapest < http://www.etd.ceu.hu/2012/ivanova_evgenia.pdf > accessed 1 August 2021
- Genoud C, Varone F, Does Privatization Matter? Liberalization and regulation: The case of European electricity, *Public Management Review* (Volume 4, Issue 2, 2002) 231- 256 < <https://doi.org/10.1080/14616670210130543> > accessed 26 November 2021
- Georgiev A, Bulgaria – the Island of Non-Liberalization, *The ICER Chronicle* (Ed. 3, March 2015) 30-34 < https://www.researchgate.net/publication/305114729_Bulgaria_-_the_Island_of_Non-Liberalization > accessed 31 October 2021
- Geradin D, Twenty Years of Liberalization of Network Industries in the European Union: Where Do We Go Now? (November 2006) < <https://ssrn.com/abstract=946796> > accessed 8 September 2021
- Ghaya K, Hariharan S, Competition Law in the Energy Sector: The European Experience, *European Energy and Environmental Law Review* (2011), Volume 20, Issue No 5, 197-206, < <https://kluwerlawonline.com.uaccess.univie.ac.at/journalarticle/European+Energy+and+Environmental+Law+Review/20.5/EELR2011018> > accessed 7 October 2021
- Gómez-Acebo & Pombo Abogados, S.L., Charles Russell LLP, Unbundling of Electricity and Gas Transmission and Distribution System Operator Final Report (1 December 2005) < https://ec.europa.eu/energy/sites/ener/files/documents/2006_03_unbundling_electricity_gas.pdf > accessed 28 November 2021
- Growitsch C, Stronzik M, Ownership Unbundling of Gas Transmission Networks – Theoretical Background and Empirical Evidence, *Papier für die Jahrestagung 2009 des Vereins für Socialpolitik, Magdeburg* (January 2009) < https://www.researchgate.net/publication/228629787_Ownership_Unbundling_of

[Gas Transmission Networks-Theoretical Background and Empirical Evidence](#) > accessed 5 October 2021

-Koch O, Nagy K, Pucinskaite-Kubik I and Tretton W, The RWE gas foreclosure case: Another energy network divestiture to address foreclosure concerns, Competition Policy Newsletter (2009, Number 2, European Commission) 32 – 34 < https://ec.europa.eu/competition/publications/cpn/cpn2009_2.pdf > accessed 2 January 2022

-Haase N, European gas market liberalisation: Are regulatory regimes moving towards convergence?, May 2008, Oxford Institute for Energy Studies, NG 24 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG24-EuropeanGasMarketLiberalisationArerRegulatoryRegimesMovingTowardsConvergence-NadineHaase-2008.pdf> > accessed 19 July 2019

-Haase N, European Gas Market Liberalisation: Competition versus security of supply, PhD Thesis submitted to University of Twente, (2009, Energy Delta Institute/Castle International Publisher, Groningen, the Netherlands) <http://doc.utwente.nl/61558/1/thesis_N_Haase.pdf > accessed 28 August 2021

-Hasanov F J, Mahmudlu C, Deb K, Abilov S, Hasanov O, The role of Azeri natural gas in meeting European Union energy security needs, Energy Strategy Reviews, Volume 28 (2020) 100464, ISSN 2211-467X < <https://doi.org/10.1016/j.esr.2020.100464> > accessed 15 October 2021

-Kayikci M S, The European Third Energy Package: How Significant for the Liberalisation of Energy Markets in the European Union? (January 14, 2011) < <https://ssrn.com/abstract=2102161> > or < <http://dx.doi.org/10.2139/ssrn.2102161> > accessed 23 July 2021

-Karagöl E T, Kaya S, Energy Supply Security And The Southern Gas Corridor (SGC), SETA, Analysis, No 10 (September 2014) < https://www.researchgate.net/publication/340591777_ENERGY_SUPPLY_SECURITY_AND_THE_SOUTHERN_GAS_CORRIDOR_SGC > accessed 14 October 2021

-Kotlowski A, Third-party Access Rights in the Energy Sector: A Competition Law Perspective, Utilities Law Review (Volume 16, Issue 3, 2006/2007), 101-109 < <https://ssrn.com/abstract=1073962> > accessed 28 December 2021

-Lyapina E, The EU Gas Regulations and their Influence on the legislation of the Czech Republic, International Comparative Jurisprudence (2018, Volume 4, Issue 1), 42-51, <<http://dx.doi.org/10.13165/j.icj.2018.06.005> > accessed 28 August 2021

-Maltby T, Between Amity, Enmity and Europeanisation: EU Energy Security Policy and the Example of Bulgaria's Russian Energy Dependence, Europe-Asia Studies, Volume 67, No 5, July 2015, Pages 809-830, < <https://www.tandfonline.com/doi/full/10.1080/09668136.2015.1046817> > accessed 28 July 2021

-Mastrapas A, Sofianos N, Stambolis C, The “Vertical Corridor” from the Aegean to the Baltic, Institute of Energy for S.E. Europe (IENE), An IENE Study Project (M26) (Athens, May 2015) < <https://www.iene.eu/articlefiles/the%20vertical%20corridor%20-%20from%20the%20aegean%20to%20the%20baltic.pdf> > accessed 20 October 2021

- Mordwa M, The obligation of strategic gas storage introduced in Poland as an example of a public service obligation relating to supply security: a question of compliance with European law, *Yearbook of Antitrust and Regulatory Studies* (Volume 4(4), 2011) 57 – 82 < https://yars.wz.uw.edu.pl/images/yars2011_4_4/Mordwa_The_Obligation_of_Strategic_Gas.pdf > accessed 4 January 2022
- Nenova S R, Improving Energy Security: Curing the Bulgarian Gas Sector's inefficiencies, (2010) Master Thesis submitted to Central European University, Budapest < http://www.etd.ceu.hu/2010/nenova_stela.pdf > accessed 14 August 2021
- Noreng Ø, Securing Natural Gas Supplies to Europe: Lessons and Prospects, *The Journal of Energy and Development* (Volume 33, Issue 1, 2007) 57-80 < <https://www.jstor.org/stable/24813047> > accessed 11 November 2021
- Nowak B, Challenges of liberalization. The case of Polish electricity and gas sectors, *Yearbook of Polish European Studies* (2(2), 2009) 141 – 168 < https://mpra.ub.uni-muenchen.de/23804/1/MPRA_paper_23804.pdf > accessed 15 November 2021
- Nowak B, The Electricity and Gas Sector in the EU: the Dilemmas of Public Service Obligations in the Context of State Aid, *Yearbook of Polish European Studies* (10,2016) 151-167 < https://www.ce.uw.edu.pl/pliki/pw/Y_10A_Nowak_PSO.pdf > accessed 9 November 2021
- Oyewunmi T, Energy Security and Gas Supply Regulation in the European Union's Internal Market, *European Networks Law & Regulation Quarterly*, Volume 3, Issue 3 (2015), 187 – 202 < <https://www.proquest.com/docview/1731750514> > accessed 9 October 2021
- Özdemir V, Yavuz H B, Tokgöz E, The Trans-Anatolian Pipeline (TANAP) as a unique project in the Eurasian gas network: A comparative analysis, *Utilities Policy*, Volume 37 (2015), 97-103, ISSN 0957-1787 < [https://doi.org/10.1016/j.jup.2015.06.007](https://doi.org/10.1016/j.jup.2015.06.007;); <https://www.sciencedirect.com/science/article/pii/S0957178715000417> > accessed 14 October 2021
- Petrova Hiteva R, Maltby T, Standing in the way by standing in the middle: The case of state-owned natural gas intermediaries in Bulgaria, *Geoforum*, Volume 54, 2014, Pages 120-131, ISSN 0016-7185, < <https://doi.org/10.1016/j.geoforum.2014.04.006> > accessed 22 July 2021
- Pront-van Bommer S, A Reasonable Price for Electricity, *Journal of Consumer Policy*, Volume 39, Issue 2 (June 2016), 141-158 < <https://doi.org/10.1007/s10603-015-9300-x> > accessed 1 November 2021
- Pye S, Dobbins A, Baffert C, Brajković J, Deane P & De Miglio R, Addressing Energy Poverty and Vulnerable Consumers in the Energy Sector Across the EU, *L'Europe en Formation* (2015/4) No 378, 64-89 < <https://www.cairn.info/revue-l-europe-en-formation-2015-4-page-64.htm> > accessed 4 November 2021
- Quadri S, 'EU Energy Market Integration through Energy Union: A New Holistic Approach' (June 2016) *Bocconi Legal Papers* Number 7, 1-16

- Reisch L A, Micklitz H W, Consumers and deregulation of the electricity market in Germany, *Journal of Consumer Policy* (Volume 29, Issue 4, 2006) 399 – 415 < <https://doi.org/10.1007/s10603-006-9016-z> > accessed 9 November 2021
- Rqiq Y, Beyza J, Yusta J M, Bolado-Lavin R, Assessing the Impact of Investments in Cross-Border Pipelines on the Security of Gas Supply in the EU, *Energies* (Volume 13, Issue 11, 2020) 2913 < <https://doi.org/10.3390/en13112913> > accessed 2 December 2021
- Ruble I, European Union energy supply security: The benefits of natural gas imports from the Eastern Mediterranean, *Energy Policy*, Volume 105 (2017) 341-353, ISSN 0301-4215 < <https://doi.org/10.1016/j.enpol.2017.03.010> ; <https://www.sciencedirect.com/science/article/pii/S0301421517301507> > accessed 14 October 2021
- Shaburova T, The Gazprom Case: A Tool to Foster an EU Internal Gas Market, *European Competition and Regulatory Law Review*, Volume 3 (2019), Issue 1, Pages 63-71 < <https://heinonline.org/HOL/LandingPage?handle=hein.journals/core3&div=14&id=&page=> > accessed 30 July 2021
- Siddi M, The EU's Botched Geopolitical Approach to External Energy Policy: The Case of the Southern Gas Corridor, *Geopolitics*, Volume 24, Issue 1: The rise of geopolitics in the EU's approach in its Eastern Neighbourhood (2019), 124-144 < <https://doi.org/10.1080/14650045.2017.1416606> > accessed 15 October 2021
- Silve F, Noël P, Cost Curves for Gas Supply Security: The Case of Bulgaria, *Energy Policy Research Group, University of Cambridge, EPRG Working Paper 1031 and Cambridge Working Paper in Economics 1056* (September 2010) < <https://www.econ.cam.ac.uk/research-files/repec/cam/pdf/cwpe1056.pdf> > accessed 31 October 2021
- Spence D B, Can Law Manage Competitive Energy Markets, *Cornell Law Review* (May 2008) Volume 93, Issue No 4, Article 8, 765-818 < <https://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=3095&context=clr> > accessed 7 October 2021
- Stefanov R, Vladimirov R, Bulgaria and the South Stream Pipeline Project, At the Crossroads of Energy Security and State Capture Risks, *Südosteuropa Mitteilungen* (Volume 54, Issue 05-06, 2014), 54-71 < <https://www.ceeol.com/search/article-detail?id=420908> > accessed 2 December 2021
- Stern J, What Makes an Independent Regulator Independent?, *Business Strategy Review* (Volume 8, Issue 2, June 1997) 67-74 < <https://doi.org/10.1111/1467-8616.00027> > accessed 13 November 2021
- Stern J, Yafimava K, The EU Competition investigation of Gazprom's sales in central and eastern Europe: a detailed analysis of the commitments and the way forward, *Oxford Institute for Energy Studies, July 2017, OIES Paper: NG 121* < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2017/07/The-EU-Competition-investigation-of-Gazproms-sales-in-central-and-eastern-Europe-a-detailed-analysis-of-the-commitments-and-the-way-forward-NG-121.pdf> > accessed 29 July 2021

- Szydło M, Regulatory Exemptions for New Gas Infrastructure. A Key Challenge for European Energy Policy', (2009), 18, European Energy and Environmental Law Review, Issue 5, pp. 254-269, < <https://kluwerlawonline.com.uaccess.univie.ac.at/journalarticle/European+Energy+and+Environmental+Law+Review/18.5/EELR2009021> > accessed 30 September 2021
- United States International Trade Commission (USITC), Natural Gas Services Recent Reforms in Selected Markets, Investigation No. 332-426, Publication 3458 (October 2001) <<https://www.usitc.gov/publications/332/pub3458.pdf> > accessed 5 September 2021
- Waloszyk M, Possibilities and Limitations for EU Gas Market Integration under the Third Energy Package (2014) Revista Romana de Drept European 2014 R.R.D.E., Volume 2014, Issue 3, 175-198 < https://heinonline.org.uaccess.univie.ac.at/HOL/Page?public=true&handle=hein.journals/rianrwioe12&div=36&start_page=175&collection=journals&set_as_cursor=0&men_tab=srchresults > accessed 25 July 2021
- Yafimava K, The EU Third Package for Gas and the Gas Target Model: major contentious issues inside and outside the EU, Oxford Institute for Energy Studies, April 2013, NG 75 < <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2013/04/NG-75.pdf> > accessed 21 July 2021
- Yu M, Liberalization of the European Natural Gas Market and Achieving Energy Security: An Internal Solution to an External Problem (2011), Dickinson College Honors Theses. Paper 178 < https://scholar.dickinson.edu/cgi/viewcontent.cgi?article=1177&context=student_honors > accessed 19 July 2021