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DEVELOPMENT OF UKRAINES WHOLESALE & RETAIL GAS MARKET GAS RELEASE PROGRAM – APPLICATION IN UKRAINE POSITION PAPER

Energy Security Project (ESP)

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ACRONYMS

AMCU	Anti-monopoly committee of Ukraine
ANRE	Energy Regulator in Romania
BAL NC	Network Code on Gas Balancing of Transmission Networks (Regulation No 312/2014)
BGH	Balkan Gas Hub (Bulgaria)
BRM	Commodity Exchange in Romania
CCP	Centralized Clearing Counter Party
CNG	Chornomornaftogaz Company
DHC	District Heating Companies
DSO	Distirbution system operator
EFET	European Federation of Energy Traders
EFET standard contracts	Standardized contracts developed by EFET to unify the main clauses and conditions for energy commodities trade
EnCS	Energy Community Secretariat
E.ON Romania	Gas company operating in Romania
ESI	Tetra Tech ES, Inc.
ESP	Energy Security Project
EU	European Union
HHs	Households
GOU	Government of Ukraine
Government of Ukraine	Gas Release Program
LGM	Law on Natural Gas Market
MOL	Hungarian gas company
MMC	Merger and Monopolies Commission in the UK (replaced by Competition Commission in 1999)
NEURC	Ukrainian Energy Regulator
NCG	Net Connect Germany (gas hub)
NRA	National Regulatory Authority
OMV	Gas company in Romania
OPCOM	Market Operator in Romania
OTC	Over-the-counter trade
PGNiG	Polish national gas company
PSOs	Public service obligations
REMIT	Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency
RGC	Regional Gas Company
SLR	Supplier of last resort
TGE	Polsih Energy Exchang
TTF	Title Transfer Facility (gas hub in the Netherlands)
TSO	Transmission system operator
UEEX	Ukrainian Energy Exchange
UGV	Ukrgazvydobuvannia Company
UOKiK	Polish National Competition Auhority
URE	Polish National Energy Regulatory Authority
WACOG	Weighted Average Cost Of Gas

EXECUTIVE SUMMARY

In August 2020, the public service obligation (PSO) mechanism for households in Ukraine was lifted. The PSO formally obliged state-owned Naftogaz company to sell the necessary amounts of domestically produced gas by Naftogaz subsidiary producers (Ukrgezvydobuvannia (UGV) and Chornomornaftogaz (CNG)) under regulated prices to the designated regional retail suppliers that supplied households. Another important aspect of the PSO mechanism was the regulated supply of domestically produced gas for district heating companies. The PSO for district heating companies is still in effect, however there are plans lift the PSO in May 2021.

Based on 2019 data, the supply to district heating companies constituted 7.4 bcm, while the supply to households constituted another 8 bcm out of the 29.8 bcm of the overall annual gas consumption.¹ Meanwhile, the overall domestic gas production constituted of 20.7 bcm, of which, c.14.9 bcm was produced by UGV and CNG (gross of technical and other losses, which constitute c.1.3 bcm of the total).²

Thus, the domestic gas production in Ukraine covers the majority of domestic gas demand (c. 70%) with the dominance of state-owned producers belonging to Naftogaz group (namely, UGV, amounting to c.70 % of domestic production or about 50% of supply for domestic gas consumption)

Since August 2020, a significant amount of gas produced by state-owned gas companies - over 6 bcma or approx. 21 % of the overall domestic demand net of losses (based on 2019 aggregated data), is no longer assigned to households, as previously was the case under the PSO. As such, approx.45.5% (net of losses) of state-owned production is no longer “earmarked” to be sold to incumbent suppliers under the PSO. While the remaining part of the state-owned production (c. 55.5%) which has been assigned for supply under PSOs to district heating companies is also expected to be released from mandatory sales by Naftogaz after the expiry of PSOs for DH companies in May, 2020.

The cessation of the PSO mechanism for household gas supply was, inter alia, considered as a possibility to enable competitive supply and enable a transparent pricing mechanism for domestic gas as suppliers would (“should”) have access to purchase domestically produced gas on competitive terms to service their consumers.

GAS MARKET CHALLENGES AND GRP OBJECTIVES

Since August 2020, the market has demonstrated a modest level of improvement with respect to competition. However, the dominant companies in the retail and wholesale segment have maintained strong, dominant, positions and continue to have the possibility to hinder further competition. The incumbent household supplier, RGC company, had significantly higher gas prices for household supply prior to the price cap for household supply, which was introduced in January 2021.³ As of Q4, 2020, RGC supply catered for approx. 69% of the retail market for HHs, the share of Naftogaz was 7% and

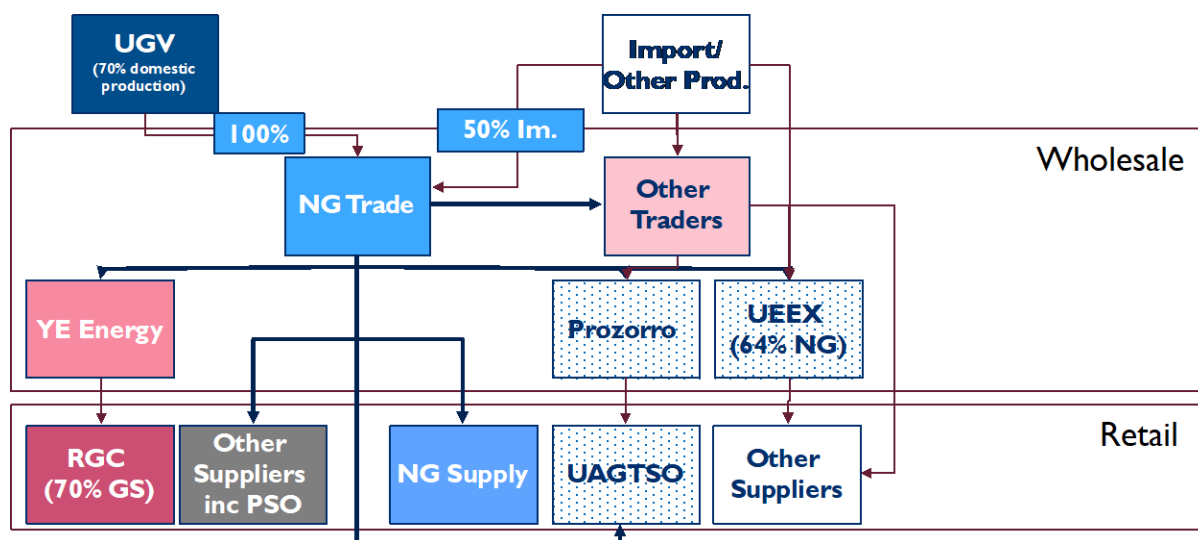
¹ [HTTPS://WWW.NAFTOGAZ.COM/WWW/3/NAKWEB.NSF/0/8B3289E9F4B2CF50C2257F7F0054EA23?OPENDOCUMENT](https://www.naftogaz.com/www/3/NAKWEB.NSF/0/8B3289E9F4B2CF50C2257F7F0054EA23?OPENDOCUMENT)

² [HTTPS://WWW.NAFTOGAZ.COM/WWW/3/NAKWEB.NSF/0/85643131C18C8258C22585070043D8C1?OPENDOCUMENT](https://www.naftogaz.com/www/3/NAKWEB.NSF/0/85643131C18C8258C22585070043D8C1?OPENDOCUMENT)

³ [HTTPS://GAZPRAVDA.COM.UA/CINI-GAZ](https://gazpravda.com.ua/cini-gaz) (SEE DATA FOR DECEMBER 2020 AND EARLIER)

24% of the other companies.⁴ The situation in the retail non-HHs market in Q-4, 2020 was different and Naftogaz had a share of 35% of the market, while RGC – 23%.⁵

Despite the removal of the PSO, the gas produced by UGV has not been openly available to all market participants on a competitive basis. There were also some signals regarding the possible conclusion of long-term commitments for gas supply under low prices between UGV and Naftogaz.⁶



The introduction of a domestic Gas Release Program (GRP) has been considered as an option for improving the situation in the market by some Ukrainian and international stakeholders, including the Energy Community.⁷

The GRP could be implemented by obliging Naftogaz gas producing subsidiaries to sell their produced gas on a transparent trading platform under certain provisions and quantities. The suggested quantities for GRP differ from 15% to almost 100% of UGV's non-PSO intended gas among the proposals, as well as offering gas for DH needs (currently covered by PSO) in special auctions.⁸ As such, the GRP will seek to make available physical gas volumes from the vast state production to all market participants on equal, competitive basis. As such, this will allow independent wholesale companies to buy gas and sell onto suppliers, or suppliers to purchase gas from the wholesale market on a competitive basis, reducing the barriers to entry for traders/suppliers to partake in the market i.e. access to domestic physical gas.

The main suggested objectives of the GRP, outlined are:

- Increase in liquidity of the Ukrainian wholesale gas market.

⁴ [HTTPS://WWW.NERC.GOV.UA/DATA/FILEARCH/MONITORING/GAS/2020/MONITORING_GAZ_IV-2020.PDF](https://www.nerc.gov.ua/data/filearch/monitoring/gas/2020/monitoring_gaz_iv-2020.pdf) (P.14)

⁵ IBID.

⁶ [HTTPS://OILPOINT.COM.UA/KONKURENCZIYA-ABO-NAFTOGAZ-HTO-NASPRAVDI-DIKTU%D1%94-CZINU-NA-GAZ-DLYA-NASELENNYA/?LANG=UK](https://oilpoint.com.ua/konkurencziya-abo-naftogaz-hto-naspravdi-diktu%D1%94-czinu-na-gaz-dlya-naseleennya/?lang=uk)

⁷ RELEASE OF NAFTOGAZ'S GAS KEY FOR CONTINUATION OF GAS MARKET REFORMS IN UKRAINE [HTTPS://ENERGY-COMMUNITY.ORG/NEWS/ENERGY-COMMUNITY-NEWS/2020/11/26.HTML](https://energy-community.org/news/energy-community-news/2020/11/26.html)

⁸ [HTTP://WI.CI.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=69642](http://wi.ci.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=69642)

[HTTPS://WI.CI.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=70473](https://wi.ci.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=70473)

[HTTPS://ENERGY-COMMUNITY.ORG/DAM/JCR:EBD6670A-C231-4FD5-BDD6-](https://energy-community.org/dam/jcr:EBD6670A-C231-4FD5-BDD6-762BF4F5880B/UKRAINIAN_GAS_MARKET_POSITION_PAPER.PDF)

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[HTTPS://WWW.NAFTOGAZ.COM/WWW/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&](https://www.naftogaz.com/www/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&)

- Increase in retail and wholesale competition and creating conditions for entering the market by alternative suppliers/traders (i.e. equal access to domestic production on competitive basis).
- Price discovery in the Ukrainian gas market (i.e. formulating a clear national index).
- Facilitating the development of new standardized products/contracts and trading platforms as a result of increasing liquidity and trading activity.



Develop liquidity and facilitate competition

- Increase volumes available to traders to trade → Increased churn rates, volume/number of trades.
- Involvement of new market participants → increase competition (evidence of GRPs decreasing share of dominant companies).



Increase transparency and impact on price discovery

- Increased transparency of national price formation.
- Improved price discovery based on national gas balance.
- Cessation of 'under-the counter' trade of large volumes of gas.



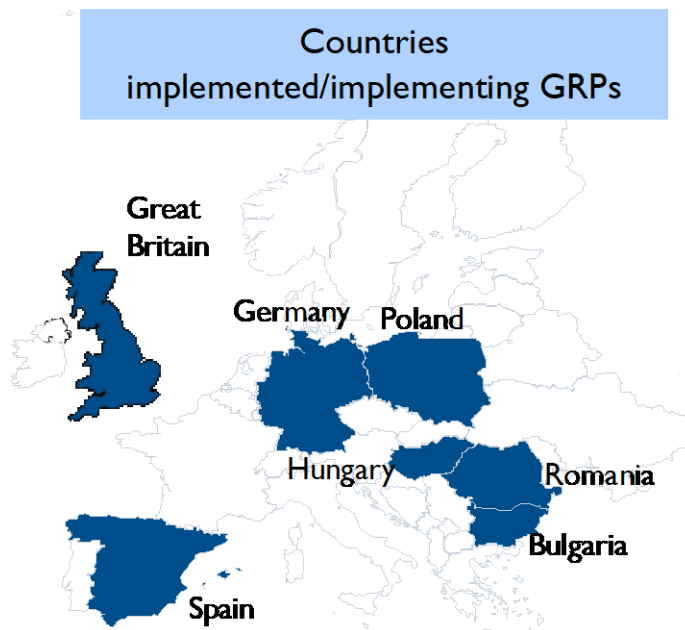
Facilitate development of standardized products / trading platforms

- Better opportunities for developing OTC platforms, exchanges and offered products.
- GRP will be conducted on transparent + licensed venues → with standardized products (with/without clearing).

GRP BENCHMARKING

It is well-known that GRP have been important steps in liberalization and wholesale market development of gas markets in the EU the past and in present: such programs took place in the GB, Germany, Spain, Hungary and are ongoing in Poland, Bulgaria, Romania, Greece and others.

ESP has conducted a comprehensive analysis of international experiences with GRPs to determine whether GRPs are truly effective in achieving the mentioned objectives and improvements to the wholesale and retail markets, and more specifically, the applications in Ukraine with consideration of lessons learned from each example.



ESP has examined three recently implemented and ongoing examples (in Poland, Romania, Bulgaria), as well as four historical and no longer active examples of GRPs (GB, Germany, Hungary, Spain).

The analysis of these GRPs demonstrates that all these programs had a certain positive impact on the market, if supplemented with the necessary efforts in improving the regulation, developing market infrastructure and active enforcement of competition provisions in gas market.

	Liquidity	<ul style="list-style-type: none"> Volumes of trade and participation increased. Churn rates increased significantly (until government intervention!). Volumes & participation increasing on the newly created platform (BGH).
	Competition	<ul style="list-style-type: none"> Reduction of dominant positions allowing for competition An increase in the number of alternative suppliers can be also noticed on historical examples of GRPs (e.g., Hungary, Spain, GB).
	Price Discovery + Transparency	<ul style="list-style-type: none"> UTC trading brought to transparent platforms → improved formation of domestic price index based on gas balance.

The reasons for establishing GRPs differ from country to country, as does the mechanisms and structure. In some cases, GRPs were considered as a particular instrument to prevent incumbents from abusing the dominant position in case of their merger with the competitors. Whereas, in many other cases (especially in recent GRPs in Eastern EU countries) these programs were aimed at fostering the overall development of the previously non-liberalized markets, i.e., the development of wholesale and retail competition and improving transparency and liquidity. The table below demonstrates the main features of the previous and ongoing GRPs and provides with some overview of their ratio to the market and impact on the position of the companies concerned.

COUNTRY	COMPANY(S)	GRP SCOPE (UPSTREAM PRODUCTION/LONG-TERM CONTRACTS)	AMOUNT OF GAS TO BE RELEASED	TRADING PLATFORM/AUCTION	STANDARDIZED PRODUCTS
Ongoing GRPs					
Romania (2020 – till present)	Romgaz and OMV Petrom	Domestic upstream production	40 % of companies' portfolio	Romanian commodity exchange (BRM) and Market Operator (OPCOM)	Forward contracts (annual, quarterly, yearly etc.).
Bulgaria (2019 – till present)	Bulgargaz	Long-term import contract with Gazprom	Up to 40 % by 2024 of company's portfolio	Balkan Gas Hub (BGH)	Forward monthly and annual contracts.
Poland (2013 – till present)	PGNiG	All sources (mainly long-term import contract with Gazprom)	55 % of company's portfolio	Polish Energy Exchange (TGE)	Not specified.
Historical examples of GRPs (no longer ongoing)					
Hungary (2004 – 2014)	E.ON/MOL	Long-term import contracts	Approx. 14 % of domestic demand.	Special auctions	Annual contracts.
Germany (2003 – 2008)	E.ON/Ruhrgas	Long-term import contracts	Around 4 % of the domestic demand	Special auctions	Annual contracts.
Spain (2001 – 2003)	Gas Natural	Long-term import contracts	25 % of the amount under long-term contracts (9% of the domestic demand)	Special auctions	Annual contracts.
Great Britain (1988 – 1996)	British Gas plc.	Long-term contracts	Variable depending on market share – ranging from 3% 1998, 9% 1991 to 19% (1992) of demand	Special auctions/bilateral	Not specified

GRP FOR UKRAINE

Despite these limitations of comparison, it may be noted that some common features, typical challenges, and possible solutions of GRPs, can be clearly illustrated for consideration for a Ukrainian application. In particular, the mechanisms of GRPs, the quantum, stages of GRPs and the impact on some particular market indicators GRPs may have: the liquidity, competitiveness, price dynamics, tendencies in different segments etc.

In particular, the most typical issues to be considered in the preparation of GRPs are:

- the demand on the market and maximum amount that may be absorbed, considering the seasonality of demand, access to storage and its costs;
- the preparedness of trading venues and conditions in the market;
- the optimal approach to establishing regulatory conditions for GRP;
- effective oversight of the market and possibility to quickly react to the possible shortcoming of GRPs and/or potential market abuse.

ESP notes several important aspects relevant to implementation of a GRP in Ukraine, primarily to reduce risks associated with GRPs:

- defining clear and measurable goals of the GRP;
- conducting a comprehensive market survey to find out the exact needs of the market in the context of both long-term and spot products;
- creating the necessary conditions of the market (in terms of organizing trading venues for trade in spot and long-term segments of the market, establishing the general principles for GRPs in legislation/regulation, ensuring effective market oversight etc.);
- preventing 'overregulation' the GRP procedures.

The GRP itself can be considered as one of the most important instruments for facilitating the development of the wholesale and retail market. It should also be supplemented with the other elements of the gas market reform (development of market infrastructure; improvement of regulation and oversight; enforcement of competition provisions; ensuring effective DSO unbundling; developing necessary standardized products; having a strong political will for reforming gas market etc.).

A GRP alone, as demonstrated in other countries, is not a stand-alone measure. Though benefits in market development is demonstrated in all examples, the extend of which and effectiveness depends on the fundamental structure of the market, namely, policy direction and sustainability, strength of the regulator and transparency in the market.

RECOMMENDATIONS AND EXPECTED OUTCOMES

ESP believes the implementation of a GRP will be fundamental to Ukraine's gas market development.

1 Equal access to gas	<ul style="list-style-type: none">• UGV volumes will be made available to traders and suppliers (& DH) on competitive basis □ stimulating competition and market participation.• Mandatory Annual Contracts □ worsening access to gas for alternative suppliers, as large volumes are to be booked by incumbents
2 Stimulate wholesale market (liquidity)	<ul style="list-style-type: none">• GRP have demonstrated precedent of increasing liquidity in other countries.• Consolidating existing UTC volume to a centralized competitive market □ improved transparency □ attract more participation (competition).
3 Increase transparency + Price Discovery	<ul style="list-style-type: none">• GRP conducted on licensed platform, on competitive and transparent basis □ increased price discovery leading to price indexation.• UTC trades □ made transparent and clear for the market.
4 Development of Standardized Long Term Products (SLTP)	<ul style="list-style-type: none">• SLTP facilitated □ demand of MPs □ enabling competitive environment.• Increased primary and secondary activity, as well as retail competition (assuming other conditions met).

The GRP can address many of the issues outlined, as well as act as the catalyst to shape the future of Ukraine's competitive gas markets in both the wholesale and retail segments. Specifically, the expected outcomes include:

1) Developing the liquidity of the market

Precedence of GRP implementation clearly demonstrates the increasing of liquidity in the wholesale market. This can be measured by:

- increased churn rates,
- increasing number of trades per each lot (churn) and traded volumes on the platforms,
- involvement of new market participants.

In emerging markets that partly share similar characteristics to Ukraine, with respect to stages of development (Romania, Bulgaria, Poland) illustrate that the GRP is effective.

2) Impact on transparency and price discovery

As more volumes of gas are released onto a licensed platform on a transparent basis, this provides an implied level of improved transparency which may have been previously withheld due to large volumes of bilateral, non-transparent trades. With greater volumes being transacted on a transparent platform, the clear formulation of domestic gas balance and respective pricing equates to improved price discovery for the benefit of the market and gas sector as a whole, i.e. the formulation of a national price.

As such, the need to link domestic prices to mature EU hubs, for regulatory purposes, protection formulation or PSO mechanisms (where applicable) can be priced off the basis of the “real” situation domestically.

From a regulatory perspective, the monitoring ability and determination of margins of retail suppliers is clearer and more transparent to determine potential abuses, while also allowing competitor to

better determine the environment, and allows better understanding of price-formation and suppliers margin over the wholesale price at the retail level. The positive effect of GRPs on price discovering has been also proved among the majority of cases from international experience.

The introduction of GRP would also result in cessation of ‘under-the counter’ trade of large volumes of gas and bringing more transparency to the market. The benefits of market transparency are also expected to contribute to the effectiveness of market oversight and better regulation. Therefore, the increase of centralized OTC and exchange trade in the course of GRP shall be combined with effective implementation of REMIT to avoid possible manipulations and/or market abuse.

3) Positive impact on competition

Ultimately, the provisions of increased liquidity, accessibility and improved transparency are pre-requisites for new entrants. As such, with those being achieved as a result of GRPs, it can be therefore outlined that increased competition in the wholesale and retail market is also a benefit of GRPs.

As mentioned, GRPs have shown a positive impact on competition. In particular,

- a. Decrease of the share of the dominant companies
- b. Improved accessibility to gas for new market entrants
- c. Increased activity and market entry

Competition is largely dependent on creating a legal and operational environment that enables market participants to have confidence in trading activities and participation. Key enablers can be considered as transparency, trust to the trading platform and effective regulation. Many of these enablers are facilitated and supported by the GRP (such as licensing of platform, transparency of trading and reporting).

4) Facilitating the development of standardized products/trading platforms

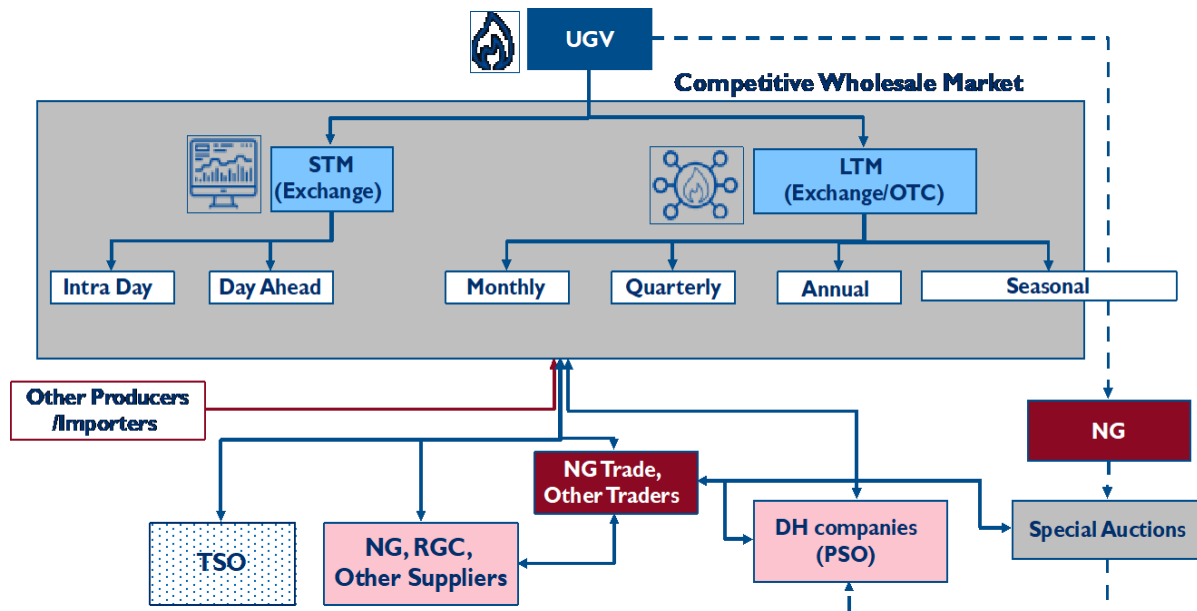
A GRP can potentially be structured in such a way that can be a catalyst for development of standardized products as well as “fast track” the development of trading platforms. As volumes should be provided on a licensed trading platform, the trading platform should adhere to the necessary standards to ensure transparent trade, effective reporting and fulfillment of large transaction amounts and data.

Products can be introduced, which otherwise would take many years to develop naturally as markets mature, but can facilitate liquidity provision for new standardized products, such as seasonal or annual products.

To date, the UEEX platform is currently the most active in Ukraine, having been established since 2017, it is also the most experienced platform and as such, can be well positioned to facilitate the needs of the GRP. However, in the absence of licensing requirements established and license for UEEX, as required by Ukrainian Law, UEEX may potentially need further improvements to be compliant with the transparency and reporting standards potentially stipulated in licensing requirements of the regulator, also having the full-fledged clearing (for spot trade).

GRP TARGET MODEL

The objective of the GRP would be to seek restructuring the current order of trade in Ukraine, in particular, reducing market dominance of monopolists, reducing barriers to entry for wholesale/retail market participants as well as facilitating competition in the market. Furthermore, in line with points 4 mentioned above, the development of standardized products should be considered, especially given the vast amounts of potential gas available for release from domestic production – granting Ukraine a unique opportunity. The target could be illustrated as follows:



From the above, it can be outlined that all suppliers of utility services (pink) obtain gas on a competitive base from traders or directly from the wholesale market.

Furthermore, and more importantly, it provides for UGV to sell its gas to the wholesale market on a competitive basis (not bilaterally via NG Trade), equalizing NG trade, which formally had exclusivity on primary trade of domestic state production, to compete with other wholesale traders on a level playing field. Wholesale traders are able to supply gas supply companies and DH companies, providing competitive offerings, while the suppliers are also able to determine value by comparing the wholesale market price vs. prices provided by wholesale traders.

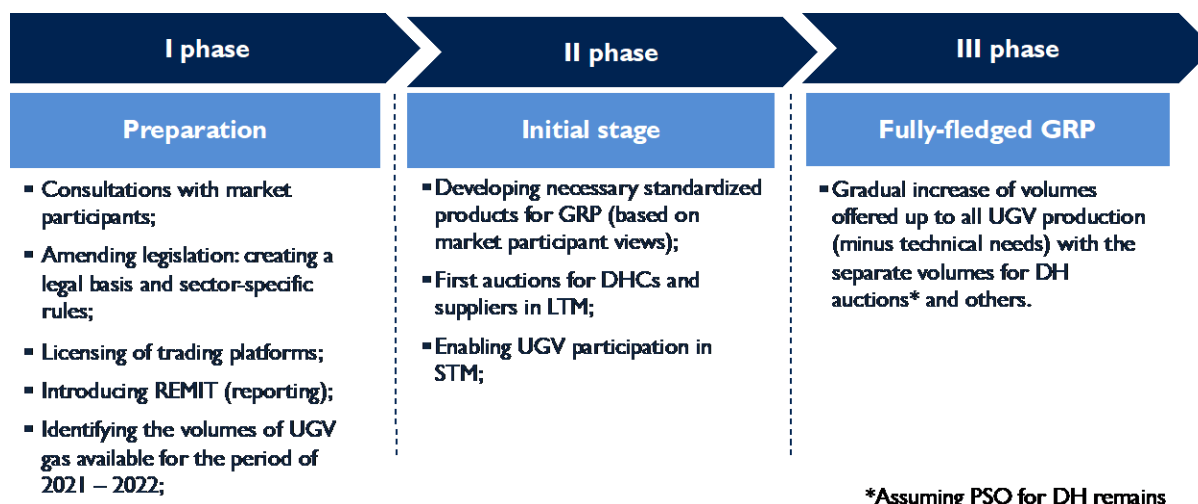
The dotted line outlines the potential structure of special auctions which may be required in the immediate term to provide gas to district heating companies on a competitive basis. These special auctions would allow for DH companies to procure gas with special terms which may be required for DH companies to secure gas on favorable conditions, however other traders can also compete for sales to the DH companies.

Lastly, the structure illustrates the different segments of the wholesale market, whereby there is clear distinction for short term market platform (the exchange with clearing), and a long-term market platform (standardized long-term products traded on an Over The Counter (OTC) basis). Volumes go to both segments allowing the TSO and network users to balance on the short-term market, while long term market provides standard products which provide for the needs of market participants.

GOING FORWARD

As previously mentioned, a GRP alone may not provide optimal results without the development of the fundamental basis for the market, or the market conditions. Taking this into account, as well as the lessons learned from other examples of GRPs.

ESP recommends organizing the GRP in several phases, while also conducting work to develop overarching elements to improve market monitoring, transparency, and integrity.



Considerations and requirements for improving the success of the GRP include:

- Extensive consultations with the stakeholders (Ministry of Energy; NEURC; market participants). This stage is important to identify the needs of the market participants and potential demand for future uptake of products in the context of necessary volumes and standardized products.
- Licensing of trading platforms (such as exchange or OTC platform) that comply with the necessary standards, ideally offering Centralized Clearing Counter Party services (CCP), and reporting mechanisms to improve transparency.
- Full implementation of REMIT requirements in Ukraine to provide effective market oversight (transparency and reporting) over the course of gas released on the licensed platforms.
- Development of standardized products in the market under which GRP volumes are to be offered and standardized contract terms (such as those provided under EFET standard contracts).
- Prescribing of explicit rules for GRP in the legislation/regulatory documents that will set the general principles and safeguards, however, without making GRP overregulated.
- Gradual release of gas of Ukrainian state-owned producers with a simultaneous monitoring of market responses and possible modification of rules to address any issues that may occur with the beginning of GRP.
- Organizing separate auctions for DH needs at the beginning as a transitional measure from PSO-regime and a step in fostering developing of the necessary standardized products and liquidity on the platform.

Aside from the gradual approach to introducing a fully-fledged GRP, numerous other activities and reforms are to be effectively implemented in Ukraine to prevent possible abuses and ensure the non-discriminatory and transparent trading. Given the breadth of additional parallel actions to be taken, it will be paramount for the necessary political will and stability, i.e. continuity of principal objectives, to be in place. Many of the initiatives to be undertaken in parallel are largely contingent on independence of the regulator and the regulators ability to conduct its role effectively, such as, providing for effective DSO unbundling (from the regional retail companies) and ensuring the effective operational independence of major state-producers from Naftogaz group in short-run (or consider some other options, eg. moving towards the unbundling of state-owned producers) is necessary to ensure the real liberalization of the market, where other enablers, i.e. GRP can effectively contribute to the further development.

I. THE OPENING OF THE UKRAINIAN GAS MARKET AND THE NEED FOR GRP

I.1. THE UNFINISHED MARKET REFORM IN UKRAINE

Since the beginning of the active stage of liberalization in 2014 and adoption of the present Law on Natural Gas Market (LGM) in 2015, the situation in the gas market has been complex. Numerous problematic issues have not yet been fully resolved, such as a low level of liquidity and transparency on underdeveloped trading platforms; high concentration in the wholesale and retail market; limited price discovery; and a need for improving market oversight.

I.1.1. LIQUIDITY AND TRADING PLATFORMS

Despite the progress in increase of the liquidity of gas market of Ukraine that has been observed in the last year, it is still quite low and difficult to be estimated, as only c. 8% of the gas volumes are traded transparently (on the 'largest' UEEX platform).

The UEEX short-term segment has been developed and started trading since October 2020, and the traded volumes are still extremely low there (e.g., the best result in the day-ahead segment were observed in February 2021 and constituted only 2109 thousand cubic meters),⁹ while the majority of trades take place in the forward segment.

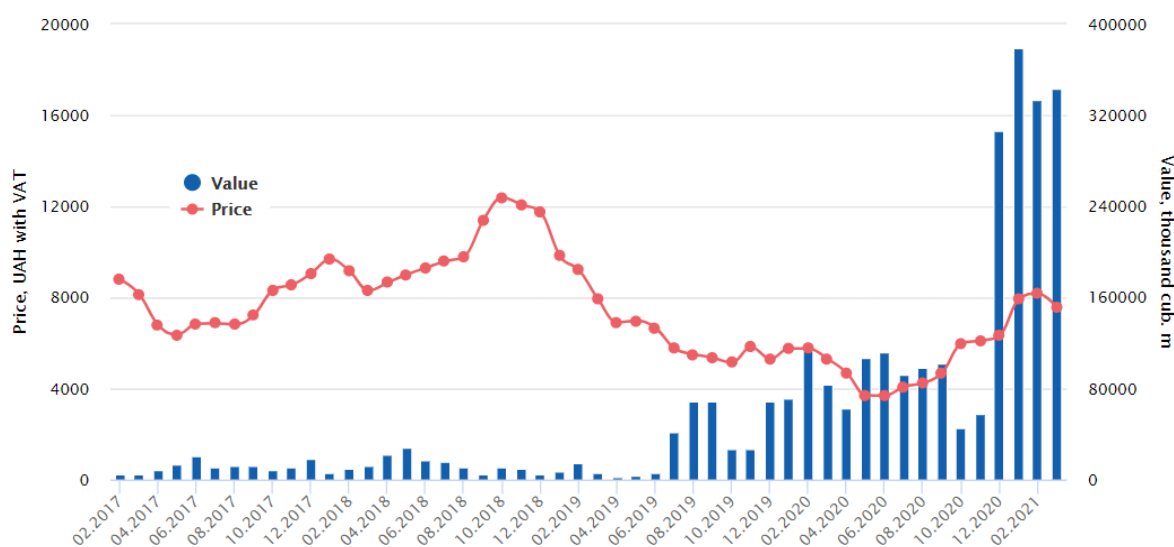


Figure I. Volumes of trade on UEEX platform.

Source: UEEX,¹⁰ ESP analysis

Some of the recent developments, i.e., opening of possibility to trade gas from storages on UEEX,¹¹ have a good potential for bringing better liquidity to the market. However, numerous issues are still to be addressed to foster the development of liquidity and bring necessary standards for trade on the platforms, e.g., developing a wide range of standardized products: annual, monthly, seasonal - which

⁹ [HTTPS://WWW.UEEX.COM.UA/RUS/EXCHANGE-QUOTATIONS/NATURAL-GAS/SHORT-TERM-MARKET-TSO/DAY-AHEAD/](https://www.ueex.com.ua/rus/exchange-quotations/natural-gas/short-term-market-tso/day-ahead/)

¹⁰ [HTTPS://WWW.UEEX.COM.UA/RUS/EXCHANGE-QUOTATIONS/NATURAL-GAS/MEDIUM-AND-LONG-TERM-MARKET/](https://www.ueex.com.ua/rus/exchange-quotations/natural-gas/medium-and-long-term-market/)

¹¹ [HTTPS://WWW.EPRAVDA.COM.UA/NEWS/2021/02/4/670709/](https://www.epravda.com.ua/news/2021/02/4/670709/)

are now limited on UEEX and do not follow European standard contract terms for physical delivery, such as those offered by EFET contracts.

In ESP's view, it is also important to make all the necessary conditions for concentration of trade on one platform during the implementation of GRP, as this would create clear and verifiable benchmarks of the overall development of liquidity, whereas the dispersion of trades among the number of platforms (with different level of development) may lead to losing of the potential benefits for liquidity increase.

Thus, it may still take time to reach a sufficient level of liquidity at the current pace of gas market reform and some more ambitious steps, i.e., introducing a GRP may significantly enhance this process, as more traded volumes are likely to stimulate developing of more options and products for trade.

1.1.2. CONCENTRATION AND ACCESS TO GAS

Regarding the high share of the incumbent companies at the wholesale and retail levels, the levels of which have not significantly changed following liberalization of household gas supply segment. The regulated segment for district heating (i.e. the public service obligation for district heating companies) remains effective as of the time of this report.

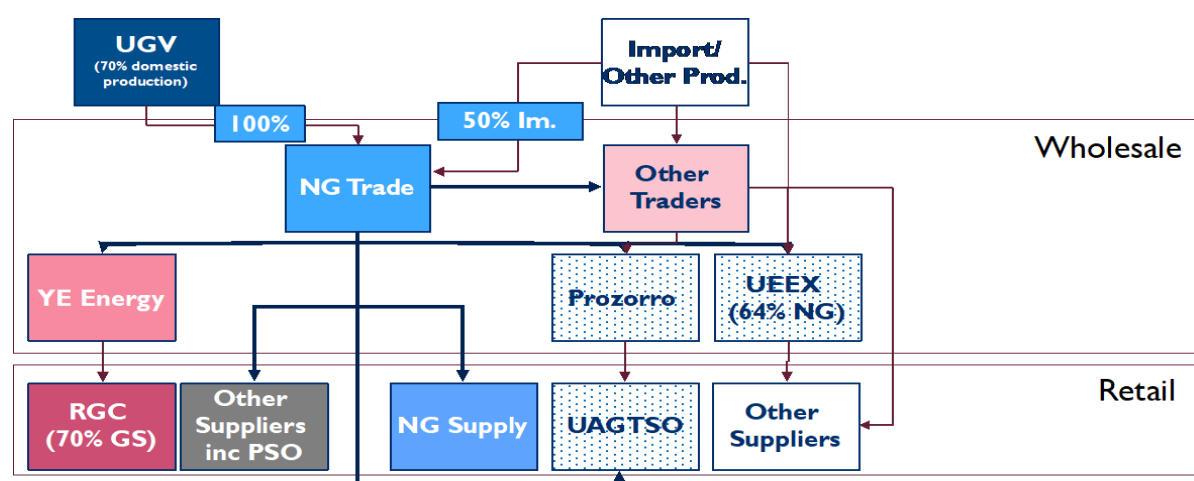


Figure 2. Overview of trading activities in Ukraine since August 1, 2020

Source: ESP Analysis (illustrative)

Considering that the regulated segment constituted at least half of the overall domestic supply (e.g., 15.4 bcm in 2019 out of a total of 29.3 bcm)¹², the situation had a significant impact on the non-regulated segment as well, where the independent companies had limited possibilities for having access to gas of Ukrainian domestic production. For instance, in 2019 when the total domestic gas production constituted 20.7 bcm, Naftogaz's subsidiary UGV produced 13.6 bcm of gas available to households and district heating companies (HH and DHC). Consequently, about 72% of domestic gas production and around a half of the overall gas demand had been excluded from the market. Together with a minor share of imported gas, this amount was either sold directly by Naftogaz (7.4 bcm to DHC) or through the regional retail companies (mostly owned by RGC group) to the HHs.

¹² <https://www.naftogaz.com/www/3/NAKWEB.NSF/0/8B3289E9F4B2CF50C2257F7F0054EA23>

This mode for supplying gas to protected customers was provided in the PSOs Decree No. 867 adopted on October 19, 2018 and several previous versions of PSOs decrees that had been adopted since 2015. Recognizing the need for a PSOs and certain measures to protect households and other groups of customers during the transitional period of market liberalization, many organizations and independent experts criticized the approach towards Ukrainian PSOs mechanism, including the provided obligations for selling of domestically produced gas from UGV and CNG directly to Naftogaz and then retail supplier-companies. The Energy Community Secretariat even opened infringement proceedings against Ukraine claiming the violation of EU and EnC *acquis* principles by organizing PSOs in this mode in 2017,¹³ also adding allegations of illegal state aid by virtue of this PSO mechanism in 2018.

However, the existence of this sort of PSOs mechanism was most likely not the only problem of the Ukrainian gas market and several other serious systemic issues have also been negatively affecting the development of the market. There has been a visible lack of an adequate market infrastructure, including the transparent licensed venues for the exchange and OTC gas trade compliant with EU standards; weak regulation and limited possibilities for market oversight and a lack of REMIT implementation; the absence of an effective daily balancing, despite launching a platform in 2019,¹⁴ close ties between the incumbent retail companies and DSOs that were only legally unbundled from the previously single companies etc. ESP has been continuously emphasizing the need to solve all these issues to enable effective liberalization of the market.

The preservation of a high degree of concentration of the market, where the incumbents have the highest shares (e.g., 65% of HHs supplies by RGC as for the Q4, 2020)¹⁵ and relatively low rate of switching after lifting PSO for HHs explicitly demonstrate the limited progress achieved in present market conditions. The interventions after the beginning of 2021, namely the introduction of price cap (UAH 6.99 /m³ cubic meter for HHs) in January – March, 2021 and obligatory annual contracts as a default option to HHs from May 1, 2021, are likely to impede the development of gas market, preserving its current structure and concentration at both wholesale and retail levels. In particular, the lack of equal access to gas of domestic production in the context of annual contracts obligation may result in intensifying of under-the-counter deals impeding the possibilities to enter the market by alternative suppliers, i.e., at the end of March, 2021 Naftogaz made a bilateral deal with YE Energy (affiliated to the dominant retail supplier RGC) on selling necessary amount of gas to enable provision of annual contracts to HHs by this company.¹⁶

I.1.3. A LACK OF TRANSPARENCY AND PRICE DISCOVERY ISSUES

With a low level of transparency, the determination of an accurate and reliable domestic price to take as a reference price is hindered. The spot market generally acts as base price for which longer term agreements can be developed from (including derivatives). As such, without effective formation of a domestic price, the development of longer term “annual” contracts can be hindered, as well as hedging instruments such as derivatives.

The GRP is likely to contribute to improving of the situation, as obliging major state-owned gas producers to offer their volumes on open platform would eliminate the practice of ‘under-the-counter’ trade. A licensing of the trading platform and its compliance with the necessary standards (also

¹³ [HTTPS://WWW.ENERGY-COMMUNITY.ORG/LEGAL/CASES/2017/CASE0217UE.HTML](https://www.energy-community.org/legal/cases/2017/case0217ue.html)

¹⁴ [HTTP://UTG.UA/UTG/MEDIA/NEWS/2019/03/UKRAINE-GAS-MARKET-SWITCHED-TO-DAILY-BALANCING.HTML](http://utg.ua/utg/media/news/2019/03/ukraine-gas-market-switched-to-daily-balancing.html)

¹⁵ [HTTPS://WWW.NERC.GOV.UA/DATA/FILEARCH/MONITORING/GAS/2020/MONITORING_GAZ_IV-2020.PDF](https://www.nerc.gov.ua/data/filearch/monitoring/gas/2020/monitoring_gaz_iv-2020.pdf)

¹⁶ [HTTP://OILREVIEW.KIEV.UA/2021/03/24/NAFTOGAZ-TA-JE-ENERGIYA-YAKA-NALEZHIT-FIRTASHU-PIDPISALI-UGODU-PRO-KUIVLYU-PRIRONOOGO-GAZU/](http://oilreview.kiev.ua/2021/03/24/naftogaz-ta-je-energiya-yaka-nalezhit-firtashu-pidpisali-ugodu-pro-kuivlyu-prirodnogo-gazu/)

provided in the recently amended Ukrainian legislation, ie., Law 738-IX) is a necessary precondition for making this step efficient. In particular, this is likely to bring a better level of transparency and also monitoring and reporting standards that would allow combating possible market manipulations and other violations of trade on the platform.

As mentioned above, effective price discovery is an important element of gas market reform allowing to formulate an adequate national price index based on the real supply and demand and other objective factors (e.g., impact of the price dynamics on EU gas hubs). Some positive development in the wholesale pricing can already be observed in Ukraine, e.g., as of the end of 2020, UEEX prices have been mostly in line with the tendencies and price levels on EU gas hubs. However, even more accurate national gas price indexation may be developed when large amount of gas of Ukrainian domestic production which, is currently traded ‘under-the-counter’, starts to be offered on the platform in open bids. This, in particular, is likely to result in turning of national wholesale index of Ukrainian gas market into an important regional indicator, considering the size of the Ukrainian market and prospective for developing a gas hub in Ukraine.

I.1.4. A NEED FOR THE NEW MODE OF GAS SUPPLY TO DH

Finally, yet importantly, from May 1, 2021, PSO regime is supposed to be lifted from another significant segment of the Ukrainian gas market – DH supplies. It is still unclear how the supplies to DH companies is going to be organized after the PSO. Making possibilities for DH companies to participate in bids via special auctions or buy gas from traders/suppliers on the market, when state-owned domestic gas producers (namely UGV) offer gas on trading platform, can be an important step in the development of the market and establishing a new efficient regime for DH supplies. Some guarantees and ‘safeguards’ to ensure the affordable price may be established at least in the transitional period of new supply regime to DH companies.

I.2. GRP AS AN IMPORTANT STEP IN SOLVING GAS MARKET ISSUES

The introduction of a GRP is seen as an important step in improving the above-mentioned present issues of the Ukrainian gas market by many stakeholders, which may foster competition and liquidity in the market, provide opportunities for alternative suppliers and result in a price discovery. The situation in the Ukrainian gas market has also many similarities with the markets where GRPs have been introduced previously. Consequently, the comprehensive analysis of the impact of GRP on the development of the gas market should consider the situation in such countries, in order to understand the best approach for Ukraine, taking into account the following aspects of the current situation in Ukrainian gas market:

- 1) A Low level of liquidity of the market;
- 2) A high degree of concentration of the market at retail and wholesale level;
- 3) Likely favorable access of Naftogaz to the resources of state-owned gas producers;
- 4) Limited transparency of the market;
- 5) Need for price discovery;
- 6) Need for preparation for the necessary trading platforms with standardized products; active spot/balancing market, reducing barriers of entry for suppliers and effective oversight by the regulator.

1	Equal access to gas	<ul style="list-style-type: none"> • UGV volumes will be made available to traders and suppliers (& DH) on competitive basis □ stimulating competition and market participation. • Mandatory Annual Contracts □ worsening access to gas for alternative suppliers, as large volumes are to be booked by incumbents
2	Stimulate wholesale market (liquidity)	<ul style="list-style-type: none"> • GRP have demonstrated precedent of increasing liquidity in other countries. • Consolidating existing UTC volume to a centralized competitive market □ improved transparency □ attract more participation (competition).
3	Increase transparency + Price Discovery	<ul style="list-style-type: none"> • GRP conducted on licensed platform, on competitive and transparent basis □ increased price discovery leading to price indexation. • UTC trades □ made transparent and clear for the market.
4	Development of Standardized Long Term Products (SLTP)	<ul style="list-style-type: none"> • SLTP facilitated □ demand of MPs □ enabling competitive environment. • Increased primary and secondary activity, as well as retail competition (assuming other conditions met).

Therefore, an effective GRP in Ukraine is likely to contribute to the restructuring of the market, where the mode for the wholesale and different segments of the retail supply is likely to be fully transformed from a largely concentrated de facto ‘single buyer’ model with limited possibilities for alternative suppliers to a significantly more diverse and transparent market with a higher level of liquidity and openness.

1.3. GRP DISCUSSION AND CURRENT PROPOSALS IN UKRAINE

Since August 2020, several proposals on introduction GRP or requirements having a similar effect have been put forward in Ukraine. ESP has analyzed all the current proposals for GRP and identified some gaps that can be addressed. ESP has developed recommendations to deliver the optimal approach for GRP based on the international experience.

Two draft laws (No. 3958 and 4400)¹⁷ were submitted to Parliament and are being considered by the Committee on energy and utilities. Both draft laws suggest introducing a mandatory requirement for state-owned gas producers (namely UGV and CNG) to sell all their production (except for the PSO-intended gas and gas for technical needs) at exchange auctions. The draft laws provide a detailed procedure determining the size of lots, price calculation (having different approaches to it), access of the market participants and other provisions setting the mode for mandatory gas trade. ESP has analyzed both draft laws and found numerous potential problems that may arise if the provisions are applied into practice. In general, it may be concluded that the provisions are largely populist, impractical, not well defined and will likely lead to logistical issues of releasing the gas through the framework. Furthermore, constraints on price and volume will likely hinder the development of real transparency and price discovery of the Ukrainian gas market.

In January 2021, the leader of ‘Batkivshyna’ faction Yulia Tymoshenko and a group of MPs registered another draft law (No. 4680),¹⁸ which suggests the obligatory selling of the domestically produced gas of all the state-owned producers and companies having agreements on joint activity with them to the designated buyer to form the resources for vulnerable customers. The price for selling is to be

¹⁷ [HTTP://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=69642](http://w1.c1.rada.gov.ua/pls/ZWEB2/WEBPROC4_1?PF3511=69642)
[HTTPS://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=70473](https://w1.c1.rada.gov.ua/pls/ZWEB2/WEBPROC4_1?PF3511=70473)

¹⁸ [HTTP://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=70956](http://w1.c1.rada.gov.ua/pls/ZWEB2/WEBPROC4_1?PF3511=70956)

established by the Regulator, according to the draft law. These provisions are not likely to lead to the improvement of the market and would rather result in hindering the access of alternative suppliers to domestically produced gas, thus contradicting the idea of GRP and having an effect similar to PSOs.

Prior to this, in November 2020, EnCS proposed its own approach to GRP in Ukraine. The EnCS paper¹⁹ proposed that UGV and CNG should provide 6.21 bcm of gas of their production for trade on both long and short-term market. Thus, state-owned gas producers to be able to cover the needs of supply to HHs and act as an active player in daily balancing market. The Government should update the PSOs Decree to enable a separate scheme of gas supply to DH companies based on auctions. The EnCS outlines that introduction of GRP in this way would increase the liquidity of Ukrainian gas market, including the spot market through enabling balancing volumes on a trading platform, enable access to gas of Ukrainian production and establish an adequate price index without a need for setting prices in Ukrainian market based on the data of EU gas hubs (TTF, NCG etc.).

Eventually, Naftogaz itself agreed to release at least 15% of its portfolio counted without taking into consideration PSO-intended amounts on exchange in applying to AMCU for the approval of acquisition of Nadra Yuzivska LLC.²⁰ The company considers that this amount would be enough to foster competition on the market. This amount, in ESPs opinion, is not likely to be enough in reality to either foster the competition or facilitate balancing, considering that in fact the announced amount constitutes slightly more than 7 % of the company's overall portfolio (if counted without considering PSO-intended gas).

From the several approaches to GRP that can be pointed out from recent discussions since August 2020, discussions are focused on the mode for organizing the exchange auctions, amounts of gas to be released and access for market participants. The attribution of GRP to achievement of many goals simultaneously (fostering of competition, formulation of national price index, increase of market liquidity and enabling access to alternative suppliers) is another aspect of this discussion.

Many of the proposals contain some contradictions with the recommendations of EFET based on the practice of GRPs in Europe (please see them summarized in Annex I), i.e., overregulation of the procedure, setting price floors etc. Moreover, it is questionable whether GRP would have a similar effect on achieving so many goals in the development of the gas market simultaneously, as is assumed by many of the proposals.

Therefore, an analysis of GRPs in other countries may also help answer the question of the total impact of GRPs on the market to better understand the role of such programs in the whole process of gas market liberalization.

¹⁹ https://energy-community.org/dam/jcr:EBD6670A-C231-4FD5-BDD6-762BF4F5880B/UKRAINIAN_GAS_MARKET_POSITION_PAPER.PDF

²⁰ <https://www.naftogaz.com/www/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&>

2. BENCHMARK OF EU GRP EXPERIENCES

The overall experience of other countries in the application of GRPs within the course of liberalization of their gas markets may be divided into two main groups. Firstly, the recent cases that concern liberalization of gas markets in (predominantly) Central and East European countries where a centralized model of market organization had existed for a long time and the process of implementation of EU acquis in energy became the main factor for introducing GRPs. The situation in these countries is usually more like the conditions of Ukraine, though there is still no 'ideal' match that would cover all the specific elements of Ukrainian gas market. Whereas the second group concerns Western European markets with a more gradual approach to liberalization of the market that began already in 1990s – early 2000s. Usually, GRPs in these countries concerned particular volumes of the long-term upstream gas supply contracts that local incumbent companies had with the non-EU producers.

Thus, the recent examples of GRPs seem to be more relevant for comparison with Ukraine due to the similarities between the markets and conditions when GRPs were established. All these GRPs are still ongoing, which also allows monitoring of recent progress and their main shortcomings. Although the second group of GRPs are less relevant to the example of Ukraine, they are still worth analyzing, as some common features can still be noticed in these examples. Moreover, the majority of the previous cases of GRPs resulted in a more substantial improvement of the markets, which makes them important to consider for Ukraine given the size and geographical importance of the Ukrainian gas sector.

All these analyzed cases of GRPs in EU countries can be utilized to extract some important lessons to be learnt in Ukraine. However, the conditions of Ukraine's gas market, which may only partly have some similarities with the analyzed cases, shall be considered in this analysis. Generally, several main aspects that are common for the most the GRPs analyzed may be pointed out for consideration in Ukraine:

- The volumes and phases of GRP shall be determined by the real needs of the market, ie., ability of market participants (including the alternative suppliers) to absorb the offered amounts of gas. In some cases of GRPs in EU (e.g., Bulgaria, Poland, Germany) the offered amounts were either unprocured by the market participants or procured predominantly by the companies having dominant positions or their affiliates. This significantly reduces the efficiency of GRPs and doesn't allow meeting all the main goals of such programs, including the goal of increasing competition.
- The mode of GRP auctions and procedures for offering gas under GRPs shall not be overregulated and organized in a framework of general market rules with only some specific provisions that may be necessary to ensure GRPs' goals in the context of particular market. Regulatory interventions in these provisions of GRP shall be minimal, transparent, justified by objective needs and proportional to achievement of their aims. The extensive regulation of GRP provisions led to some negative outcomes, i.e. lack of access of the alternative suppliers, lack of demand in the initial stages etc., and was criticized by suppliers and EFET in some of the analyzed countries (e.g., Spain, Bulgaria, Romania).
- The availability of licensed trading venues, standardized products and well-developed long- and short-term market segments is likely to facilitate the implementation of GRP and provide with the necessary level of transparency and ease the access of market participants. All the recent cases of GRP have been conducted in the transparent trading platforms with availability of variety of standardized products, which provide with more reliable trading procedure, settlement of

contracts and possibility for selling of the procured GRP gas to other market participants, also increasing the overall level of liquidity of the market. Whereas, organizing GRPs on special auctions out of the licensed trading venues, which was the case in some earlier GRPs raised some concerns regarding the access of market participants and transparency.

- Even though GRP is likely to increase the liquidity and facilitate competition, it is not likely to be enough to fully transform the market without additional efforts in enforcing competition and developing overall best regulatory approaches. The analyzed cases demonstrate that even some GRPs that have been continuing for several year (e.g., Poland) had only limited positive effect on competition and haven't led to cessation of the dominant position of the incumbents so far.
- Moreover, the situation in the markets is also affected by governmental interventions, especially the ones concerning pricing and setting additional obligations on the suppliers and upstream producers (e.g., the deterioration of market in Romania after fixing some wholesale and retail price in 2019, when certain light provisions on release of domestically produced gas had been already in place). Therefore, GRP shall be considered as an important element of increasing the liquidity and fostering competition in the market, however, it is not likely to be a 'silver bullet' able to solve all the problems of market development alone.

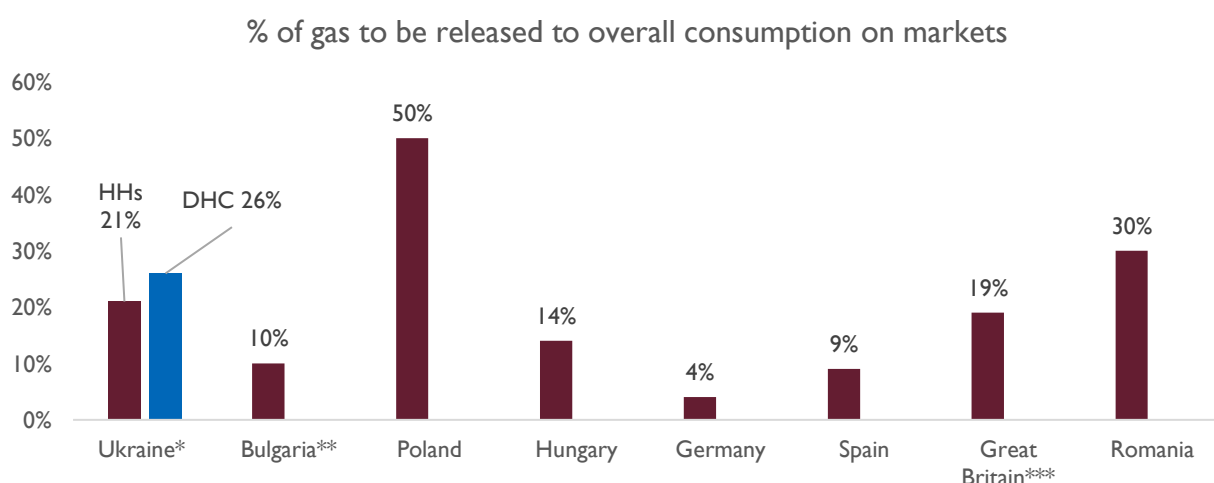


Figure 3. Benchmark of percentage of gas release vs. domestic consumption²¹

Source: ESP Analysis (illustrative)

*Maximum possible volumes in Ukraine, including district heating needs.

** The share of gas for release in Bulgaria is to be increased up to 40% to overall annual demand by 2024.

*** In different periods the share of gas for release in GB constituted from 3% up to 19%)

²¹ BASED ON THE AVAILABLE SOURCES ON ONGOING AND HISTORICAL CASES OF GRPS:
[HTTPS://WWW.KINSTELLAR.COM/INSIGHTS/DETAIL/1142/ROMANIAS-ENERGY-REGULATOR-ANRE-ENACTS-ORDER-INTRODUCING-GAS-RELEASE-PROGRAMME](https://www.kinstellar.com/insights/detail/1142/ROMANIAS-ENERGY-REGULATOR-ANRE-ENACTS-ORDER-INTRODUCING-GAS-RELEASE-PROGRAMME); [HTTPS://BALKANGASHUB.BG/STORAGE/CONTENT-FILES/PRODUCTS/GRP/AGREEMENT_GRP_EN.PDF](https://balkangashub.bg/storage/content-files/products/GRP/AGREEMENT_GRP_EN.PDF);
[HTTPS://ISAP.SEJM.GOV.PL/ISAP.NSF/DOWNLOAD.XSP?WDU19970540348/U/D19970348LJ.PDF](https://isap.sejm.gov.pl/ISAP.NSF/DOWNLOAD.XSP?WDU19970540348/U/D19970348LJ.PDF);
[HTTPS://EC.EUROPA.EU/COMPETITION/PUBLICATIONS/CPN/2006_1_73.PDF](https://ec.europa.eu/competition/publications/cpn/2006_1_73.PDF); [HTTPS://WWW.ENERGY-COMMUNITY.ORG/DAM/JCR:ECAFCAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF](https://www.energy-community.org/dam/jcr:ECAFCAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF);
[HTTPS://EFET.ORG/FILES/DOCUMENTS/INTERNAL%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%2020\(1\).PDF](https://efet.org/files/documents/internal%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%2020(1).PDF)

2.1 THE RECENT CASES OF GRPS

The recent cases of GRPs in this paper contain three examples:

- Romania (first gas release obligations in 2014 and then a more complex GRP since June 2020).
- Bulgaria (the GRP was introduced at the end of 2019 and suggests gradual increase of the released volumes until 2024).
- Poland (GRP has been introduced since 2013 with gradual increase of the volumes in 2014 and since 2015 till present).

2.1.1. ROMANIA



Background:

- 2 companies have 94% of upstream market
- Retail market mainly shared between 4 companies
- Active market liberalization began in 2014
- In 2017-2018 more than half of the gas consumed was traded via the centralized market platforms
- Rollback in the market development in 2018-2019, when gov intervened in pricing
- Price regulation lifted in January 2020
- GRP introduced in June 2020

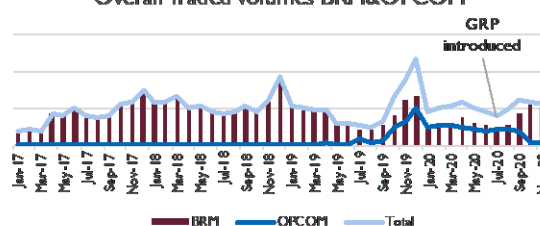
GRP requirements

- GRP volumes – 40 % annual quota for major producers (approximate consumption covered by regulated prices)
- The starting price is determined by the Regulator
- In 2021–2022 the price is to be based solely on the average prices in Romania
- Mandatory quotas for each type of standardized product

Outcomes:

- Overall volumes of trade have been constantly growing
- Tendency for improvement of liquidity is observed even though its overall level is considered to be low
- Tendency of flattening the demand and price levels on exchanges since the beginning of GRP
- Positive tendencies on the spot market, though the situation has not radically changed in this segment

Overall Traded Volumes BRM&OPCOM



2.1.1.1 MARKET OVERVIEW

The Romanian gas market shares many important features with Ukrainian one, including the significant share of domestic gas production (78 % of the overall demand) with even higher share of the dominant companies than in Ukraine where two companies – the state-owned Romgaz and the subsidiary of Austrian OMV with the minor share of Romanian state (OMV Petrom) have around 94% of the upstream market.²² A limited competition between the suppliers, where the retail market has been mainly shared between 4 largest companies (Engie Romania, E.ON Energia, Romania, OMV Petrom and Romgaz) with historically only two big suppliers particularly for the HHs (Engie Romania and E.ON Energia Romania)²³ and a late beginning of liberalization of the market is another feature that makes the situation in Romania similar to Ukraine. On the other hand, there are also some important differences between the markets, which lead to a specific approach to the GRP in Romania.

²² ANRE ANNUAL REPORT, 2019 [HTTPS://WWW.ANRE.RO/RO/DESPRE-ANRE/RAPOARTE-ANUALE](https://www.anre.ro/ro/despre-anre/rapoarte-ANUALE)

²³ SEE THE LATEST REPORTS BY ANRE, EG: RAPORT PRIVIND REZULTATELE MONITORIZĂRII PIEȚEI DE GAZE NATURALE [HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE/RAPOARTE-LUNARE-DE-MONITORIZARE-PENTRU-PIATA-INTERNA-DE-GAZE-NATURALE-2020](https://www.anre.ro/ro/gaze-naturale/rapoarte/RAPOARTE-PIATA-GAZE-NATURALE/RAPOARTE-LUNARE-DE-MONITORIZARE-PENTRU-PIATA-INTERNA-DE-GAZE-NATURALE-2020)

Thus, similar to Ukraine, the active stage of liberalization of the Romanian gas market began in 2014 when the prices on gas for non-HH customers became unregulated. In the same year the Romanian Regulator, ANRE, issued a so-called 'Centralized Market Obligation' obliging both the producers and retail suppliers to trade certain amounts of gas on the recently licensed platforms of OPCOM (the market operator of electricity and gas) and BRM (the commodity exchange).²⁴

In 2017 and 2018 more than half of the gas consumed in the country was already traded via the centralized market's platforms: i.e. in 2018 70,5 TWh out of the 130 TWh of the total consumption were traded at these platforms.²⁵ The majority of trade has been taking place in the forward segment with a limited share of spot trades (max. 7 – 10%), which exists only on BRM since 2018. The trade on exchange has also significantly intensified with the introduction of new clearing services (2017 – BRM; 2019 – OPCOM), which is also demonstrated in the volumes traded on both platforms (see charts below).

There was also a visible rollback of Romanian gas market development in 2018 – 2019 when the Government of Romania established a new scheme of intervention in pricing. In December 2018, the Romanian Government issued the Emergency Ordinance (No. 114/2018) establishing the max. prices for all households at 68 Lei/MWh (around 15 Eur/MWh at that time) until 2022.²⁶ In March 2019, the Ordinance was amended to include some provisions on obliging domestic producers to sell gas for the needs of the HH to certain suppliers at established prices. Therefore, this decision factually constituted PSO's mechanism under which Government also intervened in the formation of wholesale prices. Later (at the end of 2019)²⁷ the Government announced plans to lift the Ordinance on price regulation and, eventually, in January 2020, the provisions were lifted and new plans for GRP to be launched in June 2020 were adopted.

The situation with trade on BRM and OPCOM partly reflects the situation with intervention in wholesale pricing. It is quite visible that the overall traded volumes had shrunk significantly when the intervention in the wholesale segment (obligation for gas producers to sell at fixed prices to suppliers) took place. An obligatory selling of large amounts of gas outside of the market under special price and conditions were among the main factors leading to the decrease of traded volumes. The volumes in March – September, 2019 were significantly lower compared to previous years. The activation of trade in Q3 – Q4 2019 can very probably be explained by the announced plans to lift price regulation. Thus, it could be an important signal for the long-term segment. This, together with the overall increase of trade on OPCOM most probably led to a significant increase in traded volumes in the last months of 2019.

²⁴ [HTTPS://EC.EUROPA.EU/ENERGY/SITES/ENER/FILES/DOCUMENTS/RO_GAS_MARKET_ACUE_PRESENTATION_CESEC_OCTOBER_2019.PDF](https://ec.europa.eu/energy/sites/ener/files/documents/ro_gas_market_acue_presentation_cesec_october_2019.pdf)

²⁵ ROMANIAN ENERGY REGULATORY AUTHORITY REPORT (ANRE) 2018, P. 10, AVAILABLE AT: [HTTPS://WWW.ANRE.RO/EN/ABOUT-ANRE/ANNUAL-REPORTS-ARCHIVE](https://www.anre.ro/en/about-anre/annual-reports-archive)

²⁶ [HTTPS://EC.EUROPA.EU/ENERGY/SITES/ENER/FILES/DOCUMENTS/RO_GAS_MARKET_ACUE_PRESENTATION_CESEC_OCTOBER_2019.PDF](https://ec.europa.eu/energy/sites/ener/files/documents/ro_gas_market_acue_presentation_cesec_october_2019.pdf)

²⁷ [HTTPS://WWW.ROMANIA-INSIDER.COM/ELECTRICITY-PRICES-HOUSEHOLDS-LIBERALIZATION-MAYBE-AUGUST-2019](https://www.romania-insider.com/electricity-prices-households-liberalization-maybe-august-2019)

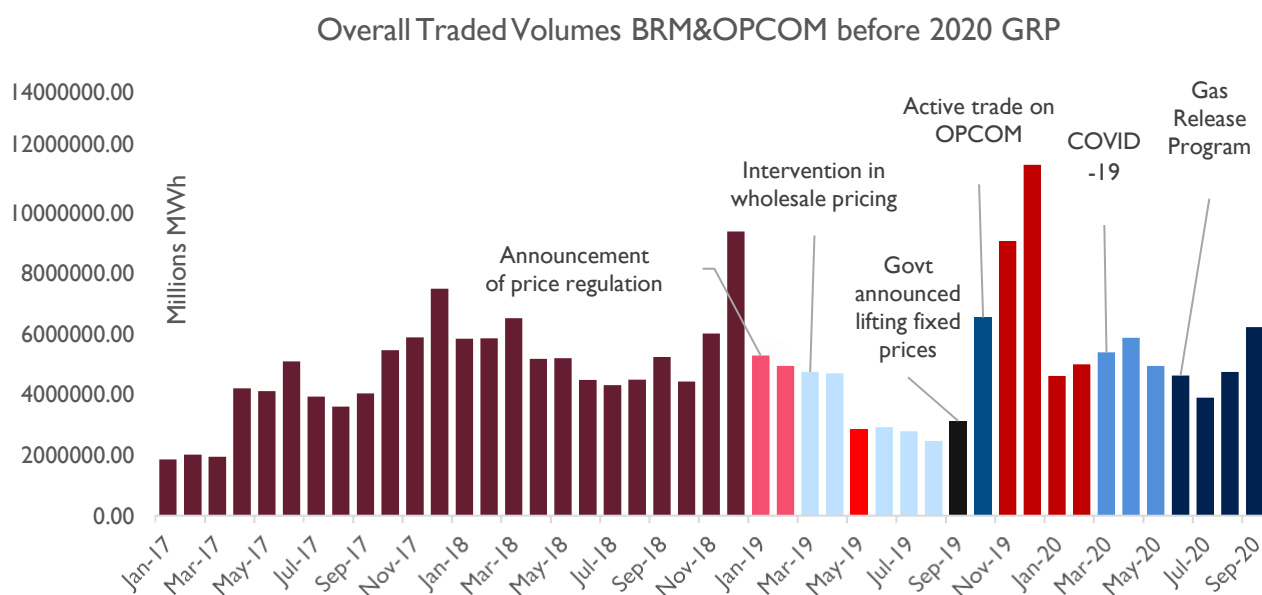


Figure 4. Romania - Total traded volumes on BRM/OPCOM before 2020 GRP

Source: ANRE Reports,²⁸ ESP analysis

Prior to the beginning of GRP in June 2020, the situation on the market had been quite different at wholesale and retail levels. The former has been quite dynamic with a moderate concentration of the suppliers and visible competition).²⁹ The retail segment is different in HHs and non-HHs supplies.

Around 90% of the supplies to HHs are performed by the two incumbent companies, namely E.ON Romania and Engie Romania, whereas, in the non-HH supplies are dominated by several large companies, including the affiliates of gas producers (OMV Petrom and Romgaz), again E.ON and Engie, as well as some other companies.³⁰

2.1.1.2 THE GRP REQUIREMENTS

The GRP is aimed at increasing the liquidity of the market, removing the dominant position of the incumbent companies, and establishing a new price framework.

The quantity of gas proposed for the GRP (40 % annual quota for major producers, which constitutes around 30% of the overall demand) reflects the approximate consumption of the consumers that had been covered by price caps before the beginning of the new stage of liberalization (i.e. households).

The starting price is determined by the Regulator and mechanism is differentiated: it combines a settlement price by the Central European Gas Hub AG and average price for the same product sold in Romania centralized market – for the period of 2020; whereas later on (2021 – 2022) the price is to be based solely on the average prices in Romania. The GRP also sets some mandatory quotas for

²⁸ BASED ON ANRE MONTHLY REPORTS FROM JANUARY 2017 TO SEPTEMBER 2020:

[HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE](https://www.anre.ro/ro/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE)

²⁹ ANRE MONTHLY GAS MARKET MONITORING REPORT, JUNE 2020 [HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE](https://www.anre.ro/ro/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE), P. 9

³⁰ IBID.

each type of standardized product (monthly, quarterly, yearly, season contracts) and some restrictions for the participating of incumbents' affiliates.³¹

2.1.1.3 THE GRP RESULTS

The beginning of GRP in Romania coincided with the outbreak of COVID-19 pandemic and related fall in gas consumption, which could negatively affect the overall traded volumes on OPCOM and BRM platforms. Nevertheless, there is clear evidence of recovery of trade in Q3 – Q4, 2020. In September 2020 volumes have reached the level of the best previous years has and there now appears to be stable growth (the latest data available by Romanian NRA – ANRE).³² However, the charts below demonstrate that the volumes of trade on OPCOM platform have been significantly shrinking since the beginning of 2020 and especially rapidly since the 3rd quarter of 2020, while trade on BRM has been gradually increasing since the beginning of GRP.

This tendency may be explained by several factors. In 2020 both platforms faced seasonal fall in traded volumes after the peak at the end of 2019 and BRM might have been able to recover more quickly due to the better liquidity, variety of products and more trading platforms available, having 3 active forward and spot platforms (while OPCOM factually has only one active forward platform in gas). Later these BRM's advantages could also provide it with better attractiveness in GRP, where certain quotas for different types of products were established. Eventually, the other factor that could influence the significant fall of trade on OPCOM in 2020 could be the insolvency and withdrawal of one the largest suppliers – AIK Group – from the Romanian market.³³

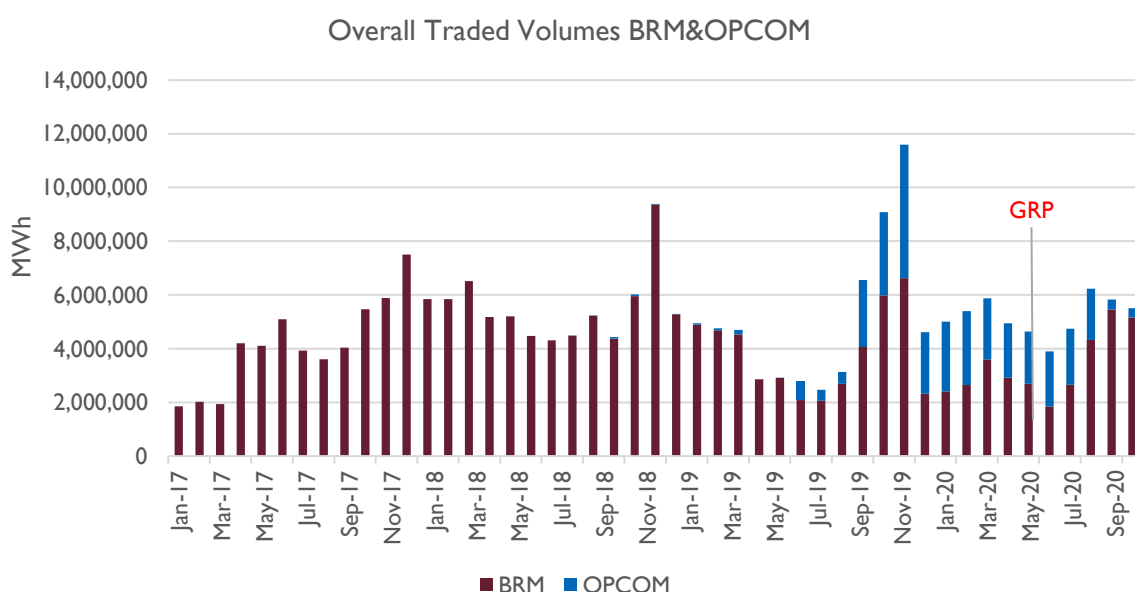


Figure 5. Total volumes of gas trade on BRM/OPCOM

Source: ANRE monthly statistics,³⁴ ESP analysis

³¹ <https://www.kinstellar.com/insights/detail/1142/ROMANIAS-ENERGY-REGULATOR-ANRE-ENACTS-ORDER-INTRODUCING-GAS-RELEASE-PROGRAMME>

³² <https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-piata-gaze-naturale>

³³ <https://spotmedia.ro/stiri/economie/mai-merita-sa-ne-schimbam-furnizorul-de-gaze-unul-dintre-cei-mai-cunoscuti-a-intrat-in-incapacitate-de-plata-dupa-doar-cateva-luni-de-la-liberalizarea-pietei-ce-patim-cand-se-intampla-asta> (TRANSLATED AUTOMATICALLY FROM ROMANIAN).

³⁴ BASED ON ANRE MONTHLY REPORTS FROM JANUARY 2017 TO SEPTEMBER 2020: <https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-piata-gaze-naturale>

The Romanian gas market is generally considered not well-developed in terms of liquidity. The level of liquidity of the market reached its worst situation in 2019 when the price intervention by the Government was the most active. This was also reflected in some independent reports.³⁵ The lack of predictability and clear rules for obligatory selling of the domestically produced gas, as well as extensive intervention in pricing in 2019, were among the main reasons for poor liquidity being observed.

The data from BRM³⁶ demonstrates some trends of increasing the liquidity in a few stages since 2019 when the extensive price regulation was lifted (similarly at that time OPCOM managed to attract some of the market participants by launching new forward platform with cleared products) and after introduction of the GRP in June 2020.

Now the dynamics of participation on trades on BRM have already reached the level of the best earlier indicators (before 2019) with even a more stable tendency, unlike OPCOM, which has a significant decrease in traded volumes and in number of market participants. As it was mentioned above, several reasons could affect this situation. The GRP, which set some mandatory quotas for different types of products (annual, monthly, seasonal etc.) is probably one of the main factors which gave BRM a better position, considering the higher liquidity, better diversity, and other competitive advantages of this platform. This situation demonstrates the twofold nature of GRPs with the excessive regulation of trading process, where some platforms may not withstand competition if market participants have to comply with the number of mandatory requirements. This again is not likely to facilitate the development of Romanian gas market, but rather make it even more bureaucratized and overregulated.

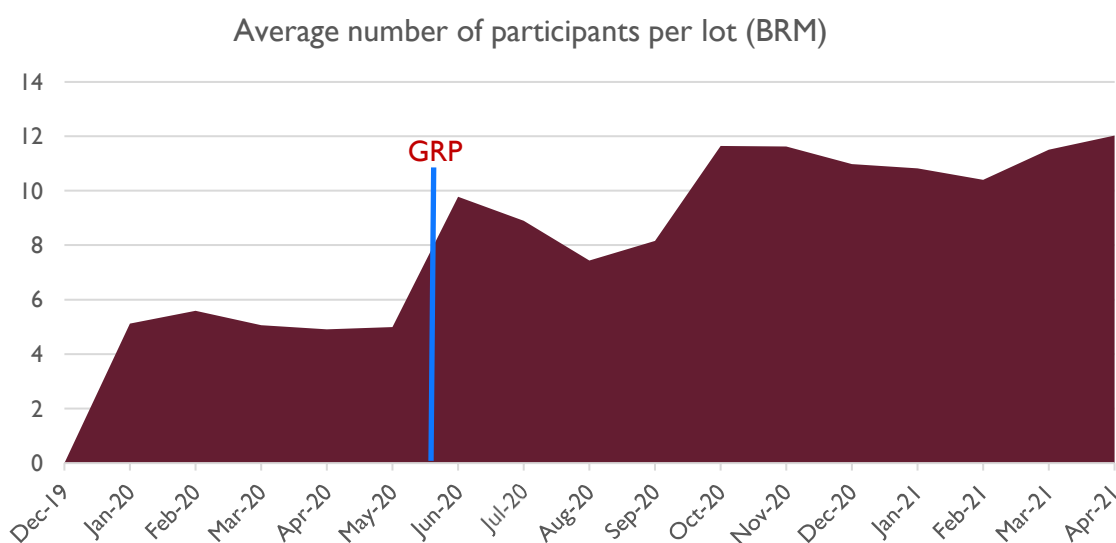


Figure 6. Number of market participant per each lot on BRM

Source: BRM forward market statistics,³⁷ ESP analysis

Similarly, the number of transactions per each lot has increased on BRM, which is another indicator demonstrating the growth in liquidity.

³⁵ I.E, A REPORT BY EMERTON CONSULTING COMPANY (MAY 2019), P. 11
[HTTPS://WWW.EMERTON.CO/APP/UPLOADS/2019/09/STUDIU_GASMARKETDESIGN-EMERTON_ENG.PDF](https://www.emerton.co/app/uploads/2019/09/STUDIU_GASMARKETDESIGN-EMERTON_ENG.PDF)

³⁶ [HTTPS://WWW.BRM.RO/PIETE-GAZE-NATURALE/](https://www.brm.ro/piete-gaze-naturale/)

³⁷ BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-FORWARD-GN/](https://www.brm.ro/piata-forward-gn/)

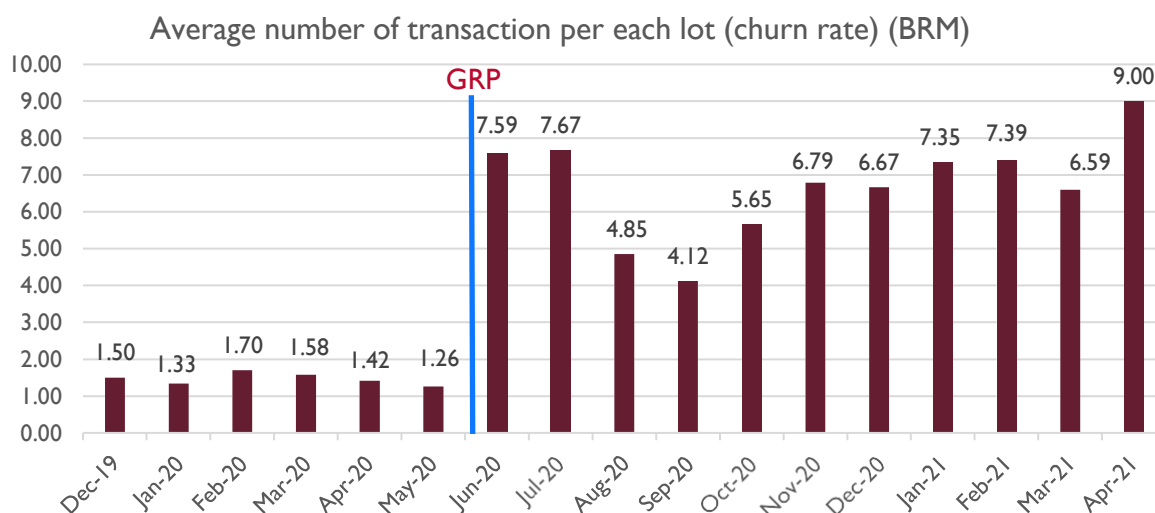


Figure 7. Number of transactions per each lot on BRM

Source: BRM forward market statistics,³⁸ ESP analysis

The average quantity of each lot traded has also shrunk significantly, while enormously big lots have almost disappeared, which may demonstrate the tendency to flattering the demand in exchanges.

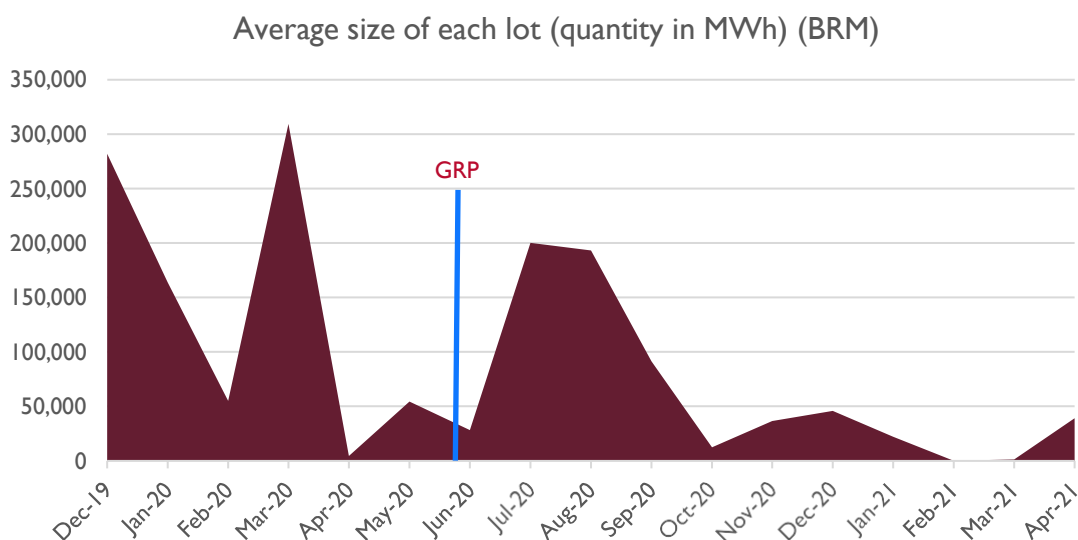


Figure 8. The quantity traded by each lot on BRM

Source: BRM forward market statistics,³⁹ ESP analysis

Eventually, the weighted average price on BRM also demonstrates a tendency for gradual flattering and align with the developed EU gas hubs. Previously, prices on Romanian used to have a visible premium over the mature EU hubs (see the chart below). With linking of GRP starting prices to CEGH index,

³⁸ BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-FORWARD-GN/](https://www.brm.ro/piata-forward-gn/)

³⁹ BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-FORWARD-GN/](https://www.brm.ro/piata-forward-gn/)

the more realistic price level has been discovered and maintained even after this formula for calculating the starting price lost its effect in January 2021.

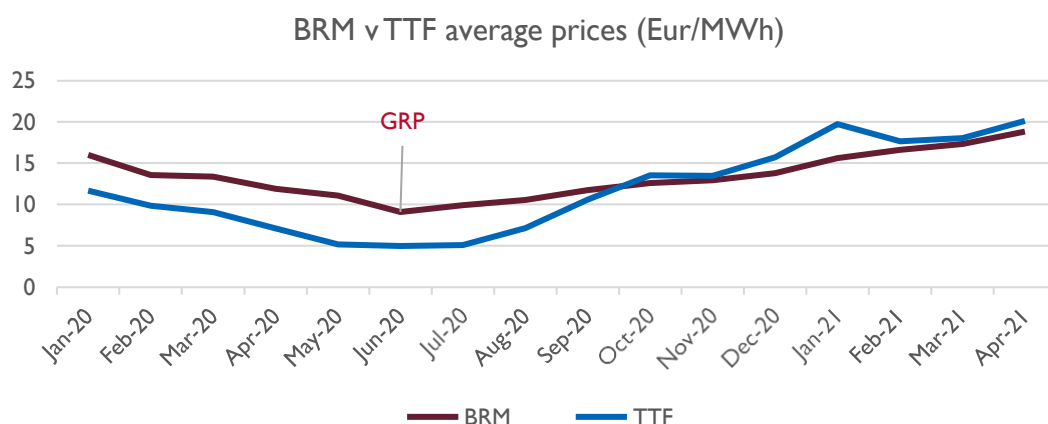


Figure 9. Weighted average prices on BRM v. TTF⁴⁰

Source: BRM forward market statistics,⁴¹ ESP analysis

The situation in the spot market, which is factually operating only on the BRM exchange, has also changed, though not significantly since the beginning of GRP.

For instance, there is a certain increase in the number of participants and transactions in the spot market. Nevertheless, the change in these numbers has not been significantly bigger than before (see tables below).

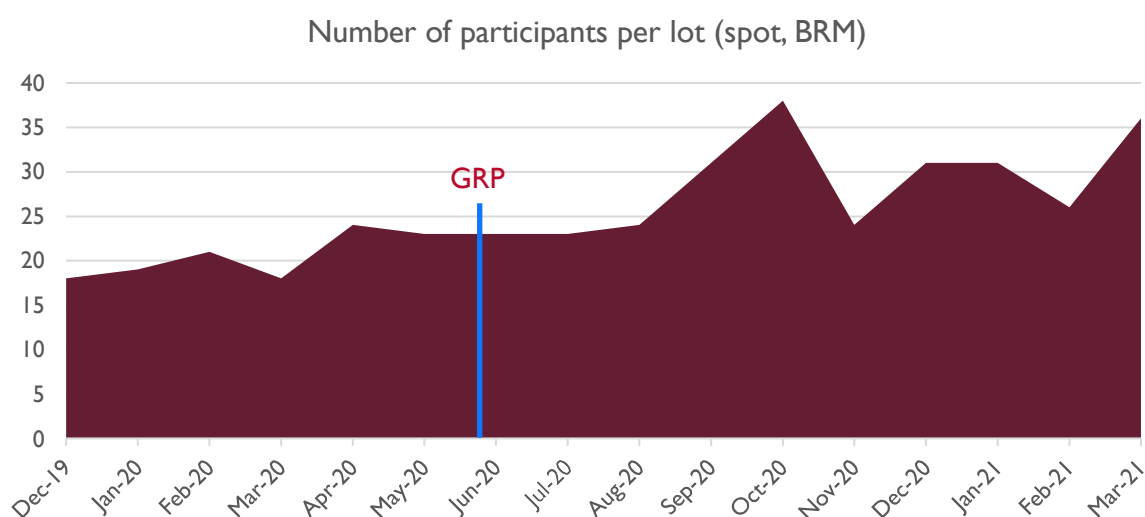


Figure 10. Number of participants per each lot on BRM spot

Source: BRM spot market statistics,⁴² ESP analysis

⁴⁰ BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-FORWARD-GN/](https://www.brm.ro/piata-forward-gn/) AND ESP WHOLESALE MARKET ANALYSIS

⁴¹ BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-FORWARD-GN/](https://www.brm.ro/piata-forward-gn/)

⁴² BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-SPOT-GN/](https://www.brm.ro/piata-spot-gn/)

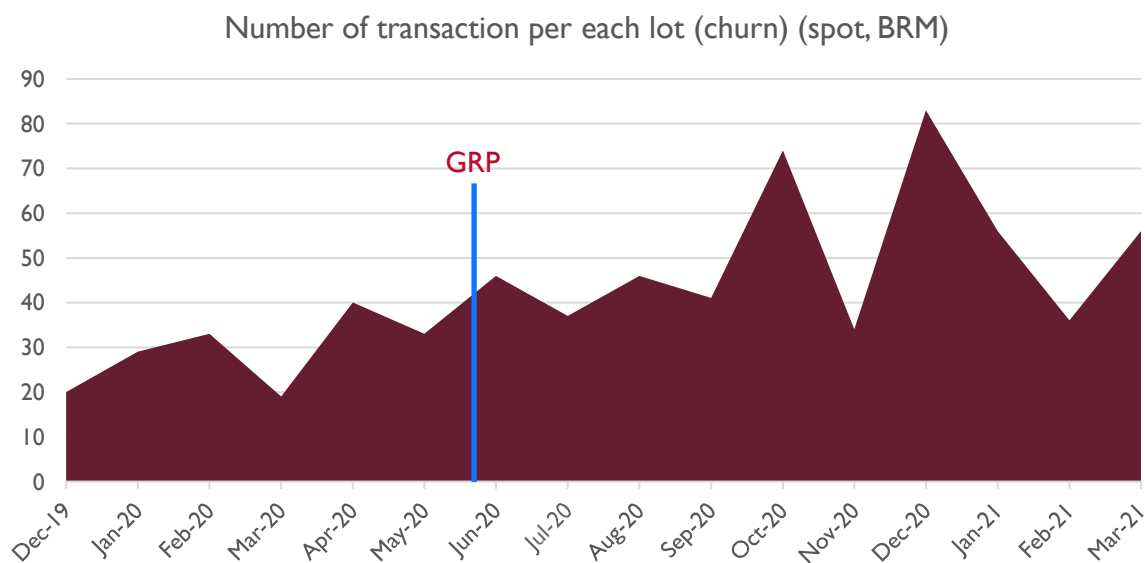


Figure 11. The number of transactions per each lot on BRM spot

Source: BRM spot market statistics,⁴³ ESP analysis

The GRP hasn't radically transformed the structure of the market and positions of the main players (at least in the short run). According to the latest data available, the main companies at both wholesale and non-regulated retail levels⁴⁴ haven't lost their positions and the general composition of the market remained the same.

In particular, Engie Romania has been still in the leading position in the wholesale market competing with a few other big players (WIEE Romania, MET Austria GmbH etc.). The situation has slightly changed since September 2020 when one of the previous leaders of the market – AIK Group left the Romanian energy market (in both gas and electricity) and some of the other companies became among the largest in the market.

⁴³ BASED ON RECENT BRM DATA: [HTTPS://WWW.BRM.RO/PIATA-SPOT-GN/](https://www.brm.ro/piata-spot-gn/)

⁴⁴ [HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE](https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-piata-gaze-naturale)

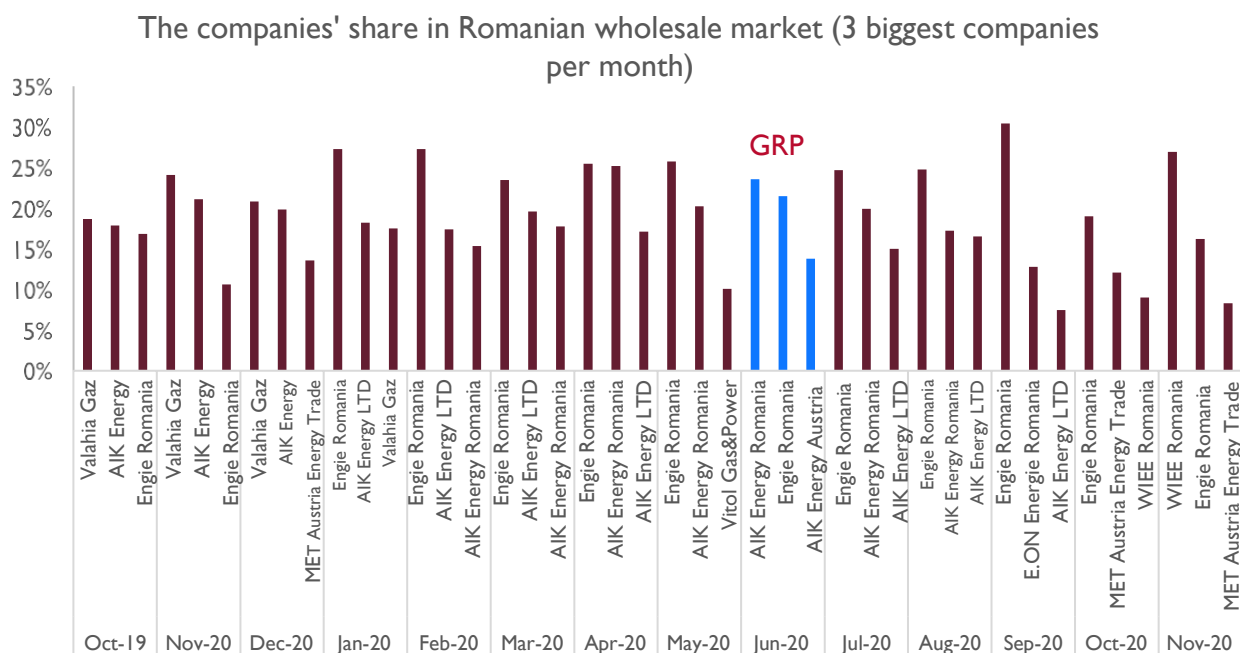


Figure 12. The companies' share in Romanian wholesale market (3 largest companies per month)

Source: ANRE monthly reports,⁴⁵ ESP analysis

Some similarities can be observed in the situation in the retail segment of the market, particularly, in the non-HH segment, which has been more competitive than the supplies to HHs since the earliest attempts of market liberalization (in 2014). However, a significant concentration of the suppliers is observed in non-HHs retail market. The affiliates of the main gas producers (Romgaz and OMV Petrom) have a traditionally strong position here.

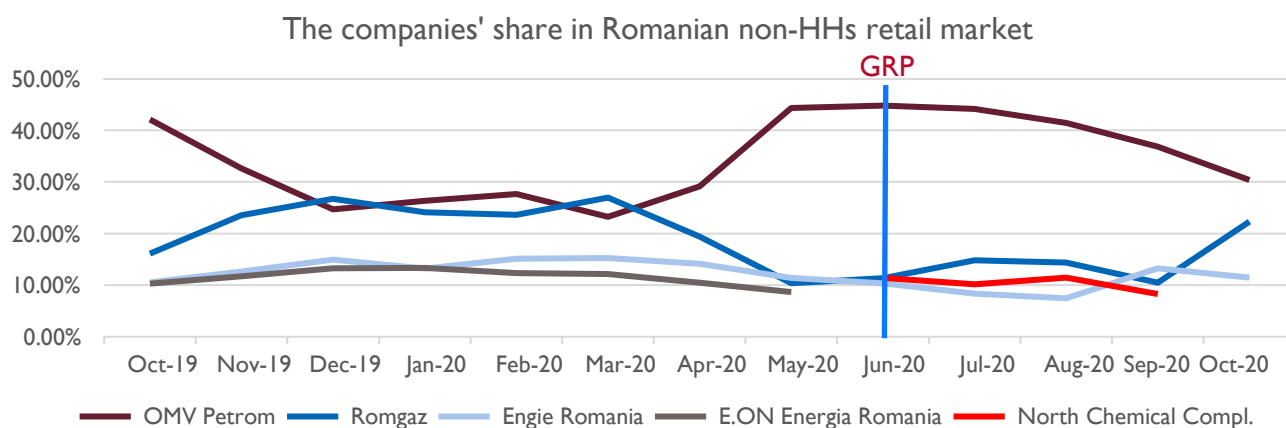


Figure 13. The companies' share in Romanian non-HHs retail market (largest companies per month)

Source: ANRE monthly reports,⁴⁶ ESP analysis

⁴⁵ BASED ON ANRE MONTHLY REPORTS FROM JANUARY 2017 TO SEPTEMBER 2020:
[HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE](https://www.anre.ro/ro/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE)

⁴⁶ BASED ON ANRE MONTHLY REPORTS FROM JANUARY 2017 TO SEPTEMBER 2020:
[HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE](https://www.anre.ro/ro/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE)

Meanwhile, the situation in retail supplies to HHs remains almost unchanged since the beginning of liberalization of Romanian market. Two companies, namely E.ON Romania and Engie Romania share more than 90% of this market with a minor participation of other companies. The price regulation for supplies to HHs was lifted in June 2020 almost simultaneously with the introduction GRP. Nevertheless, this had a minor effect on the reducing of concentration of the market and losing of the dominant positions by incumbent, as the chart below demonstrates.

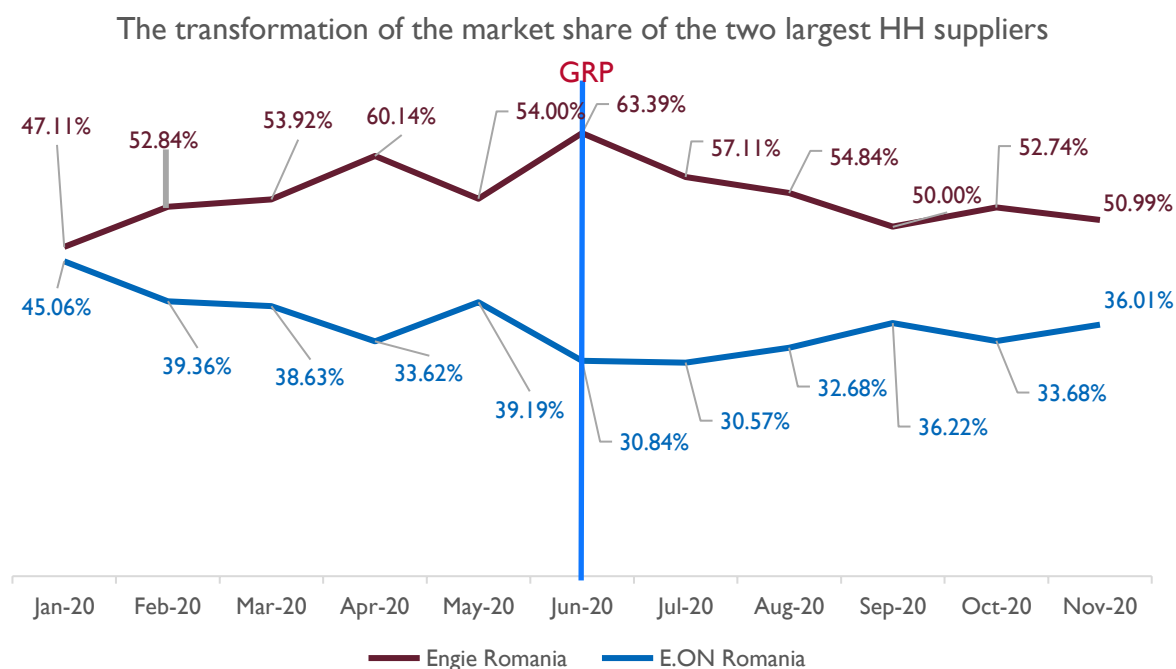


Figure 14. The companies' share in Romanian HHs retail market (2 largest companies per month)

Source: ANRE monthly reports,⁴⁷ ESP analysis

2.1.1.4 ROMANIA – LESSONS TO BE LEARNT

It can be generally concluded that the recent GRP in Romania has brought some positive effects, which was reflected in the slight increase of liquidity, the tendency for increase of traded volumes in centralized market and stabilizing the average price. Nevertheless, these changes do not seem to lead to the complete transformation of the market and some problematic issues are also present in the case of Romanian GRP. For instance, the overregulation of the GRP process and provision of numerous requirements for market participants could have a negative impact on the development of trade on less competitive platforms, namely OPCOM, and bureaucratization of GRP. Moreover, the overall structure of the market almost hasn't changed since the beginning of GRP and most of the incumbent companies still have keep their position.

Some of these limitations of GRP can be explained by a short time passed since the beginning of the current GRP and possible improvements when the second stage of the program (2021) begins. Nevertheless, the previous development of Romanian gas market demonstrates that some other increases of trading activity have already taken place even before introduction of the GRP, for instance, in the Q4 of 2019 when trades on both OPCOM and BRM platforms significantly increased. This could be a result of other factors, for instance, announced plans for lifting excessive price regulation, rise of

⁴⁷ BASED ON ANRE MONTHLY REPORTS FROM JANUARY 2017 TO SEPTEMBER 2020:
[HTTPS://WWW.ANRE.RO/RO/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE](https://www.anre.ro/ro/GAZE-NATURALE/RAPOARTE/RAPOARTE-PIATA-GAZE-NATURALE)

competitiveness of OPCOM platform etc. Some simultaneous reforms and improvements in Romania, for instance, a better cross-border exchange with other EU markets, may also contribute to a rapid development of gas market and should be considered as no less important activities than announcement of GRP. Therefore, the Romanian example demonstrates that GRPs are definitely able to bring certain improvements to gas market; however, they are not likely to fully transform the market without necessary simultaneous steps. Besides, the overregulation of GRP procedures may even lead to some negative consequences and less initiatives of market participants.

2.1.2. BULGARIA



Background:

- Absence of significant domestic production
- Reliance on long-term supply contract with Gazprom
- Limited number of participants in the market
- Prices regulated even at the wholesale level until 2020
- In 2019 liberalization of the gas market have started. Some of the consumers and suppliers were excluded from the regulated pricing
- GRP coincided with market opening & exchange launch

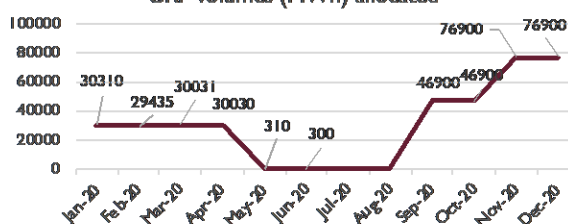
GRP requirements

- GRP launched in 2020
- Bulgargaz is obliged to sell ~8% of total volumes at the exchange
- Starting price is based on WACOG at the GTS entry and costs to organize the trade
- Mandatory quotas for each type of standardized product
- 50 % on annual basis and 50% on monthly basis
- Several rounds to be organized each year

Outcomes:

- Only 32% of volumes suggested for GRP were released in 2020 due to a lack of demand
- However, even the release of 32% of volumes resulted in some positive shifts in spot segment (increase in trade in the day-ahead and intraday segments)
- Auctions for 2021 demonstrate tendency for increase. After 5 initial auctions 46% of offered volumes were sold

GRP volumes (MWh) allocated



2.1.2.1. MARKET OVERVIEW

The Bulgarian GRP relates to the ongoing late liberalization of the domestic market of this country. Most of the domestic suppliers have bilateral contracts with the incumbent Bulgargaz company – the main importer and wholesale market player in Bulgaria. National regulatory authority (Energy and Water Regulatory Commission (EWRC)) used to fix prices even at the wholesale level, including the prices by which Bulgargaz sold gas to other suppliers until the end of 2019.⁴⁸

There are very limited number of sources for gas supply to the national market: the vast majority comes from the import (Bulgargaz contract with Russian Gazprom as a dominant external supplier) – around 28.98 TWh out of 29.20 TWh (approx.. 99%) of final consumption in 2019,⁴⁹ while domestic production constitutes an extremely minor share. Thus, the market has been dependent on a single supplier (Bulgargaz) for a long time, which concentrated most of the domestic consumption without any effective competition in place.

In 2019, the Energy Law of Bulgaria was changed to enable liberalization of the gas market. Some of the consumers and suppliers were excluded from the regulated pricing and obligation of Bulgargaz to sell certain amount of gas in 2020 – 2024 (increasing from 0.29 bcm to 1.14 bcm) at the newly-created

⁴⁸ ANNUAL REPORT (2019) OF THE BULGARIAN ENERGY AND WATER REGULATION COMMISSION (REGULATORY AUTHORITY), P. 64 [HTTPS://WWW.DKER.BG/UPLOADS/2020/GOD_DOKLAD_2019.PDF](https://www.dker.bg/uploads/2020/GOD_DOKLAD_2019.PDF) (SOME PARTS ARE TRANSLATED FROM BULGARIAN USING THE AUTOMATIC TRANSLATION).

⁴⁹IBID.

Balkan Gas Hub (BGH) platform was provided. The obligation of selling some amounts of gas at BGH by Bulgargaz constitutes the basis of the GRP in Bulgaria, which is considered as possibility to obtain some amounts of gas by alternative suppliers that are emerging in Bulgarian market.

2.1.2.2. THE GRP REQUIREMENTS

Based on the Energy Law of Bulgaria and the Agreement with BGH,⁵⁰ Bulgargaz is obliged to sell certain amount of gas (i.e., 2.2 TWh in 2020) at BGH platform through annual (50 % of annual quantity) and monthly (another 50% of annual quantity) contracts. Several rounds of auctions are to be organized to sell this amount throughout the year in each month. If the quota for yearly contracts remains unsold by the end of the year, the remaining amount is to be sold on monthly contracts in auctions conducted in the year of delivery. Certain minimum and maximum thresholds for lots under each type of contract are also provided.

BGH provides a separate segment for trade under GRP, which is separated from the general forward segment.

The starting price is based on weighted average cost of natural gas at the entry of the gas transmission system; costs of providing natural gas under the release program (conditionally fixed and variable); costs due to imposed public service obligation; costs of providing the required capacity.

Even though there are no general restrictions to participate in bids, the participants should complete the procedure on access to the gas transmission system according to TSO's requirements and sign Agreement for participation in the market segment for implementation of natural gas release program with Balkan Gas Hub.

2.1.2.3. THE GRP RESULTS

The case of Bulgaria is another example of the recent GRP, which, however, is significantly different from the case of Romania, as the Bulgarian market had been at a much lower stage of development when GRP was introduced. In fact, GRP coincided with the market opening and launching of BGH. The structural difference between Romanian and Bulgarian markets (absence of significant domestic production, reliance on the single external supplier under long-term upstream contract, a limited number of participants in the market etc.) leads to a completely different situation and purposes of GRP, which is mainly aimed at creating basic conditions for the market.

A minor part of the volumes suggested for GRP (32% of the planned volumes) were released in 2020 possibly due to a lack of demand on the new platform and some issues with the transparency of price formation.⁵¹ Most of the released amounts concerned contracts for January – April and September – December 2020 deliveries.

⁵⁰ AGREEMENT FOR IMPLEMENTATION OF GAS RELEASE PROGRAM AVAILABLE AT BGH WEBPAGE: [HTTPS://BALKANGASHUB.BG/STORAGE/CONTENT-FILES/PRODUCTS/GRP/AGREEMENT_GRP_EN.PDF](https://balkangashub.bg/storage/content-files/products/grp/agreement_grp_en.pdf)

⁵¹ THIS POINT WAS PROVIDED BY THE REPRESENTATIVE OF BGH KIRIL RAVNACHKI DURING THE 2ND SEEGAS INITIATIVE STAKEHOLDERS MEETING.

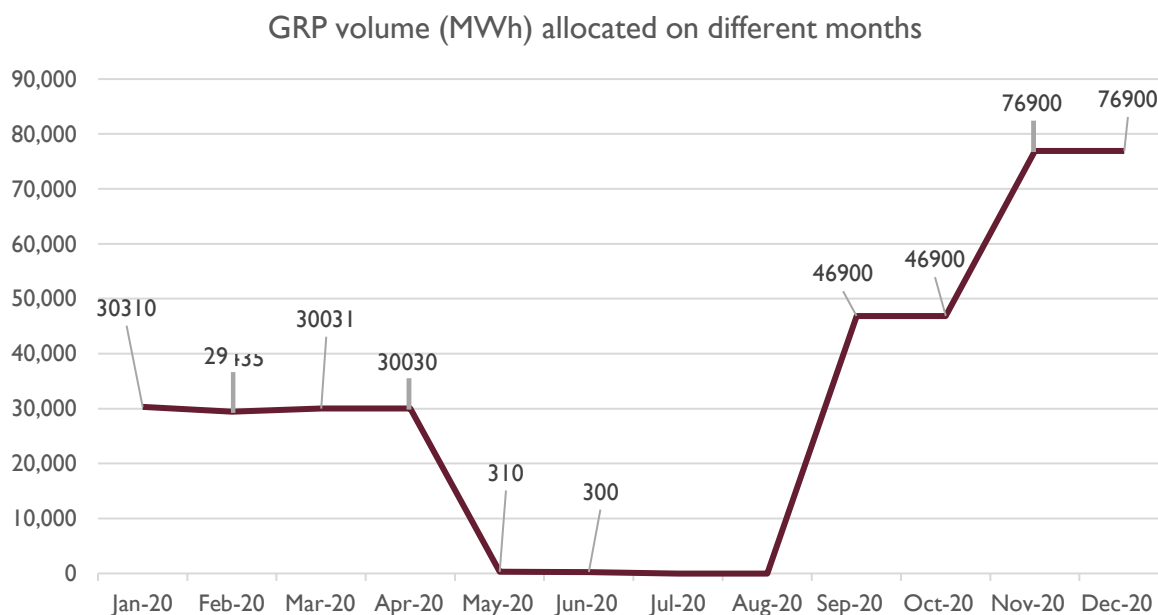


Figure 15. GRP volume (MWh) allocated on different months

Source: Balkan Gas Hub,⁵² ESP analysis

However, even the release of these volumes may have resulted in some improvements in the market. For instance, an increase in trade in the day-ahead segment was noticed for the respective periods of delivery (please see below according to the Balkan Gas Hub data).

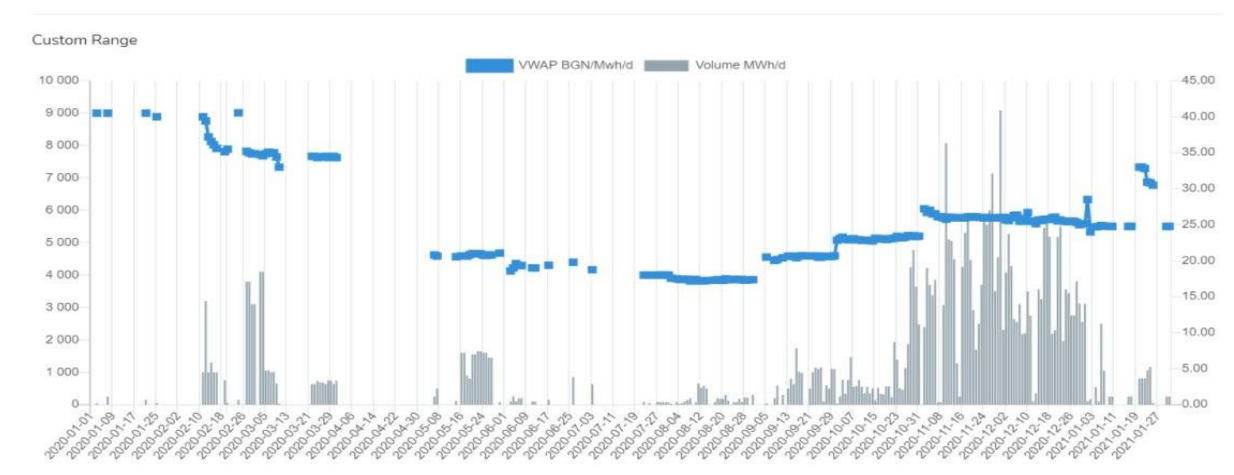


Figure 16. Trade in the day-ahead segment (BGH)

Source: Balkan Gas Hub,⁵³ ESP analysis

A similar tendency can be seen in the intra-day market as well.

⁵² BASED ON BGH DATA: [HTTPS://WWW.BALKANGASHUB.BG/EN/PRODUCTS/GRP](https://www.balkangashub.bg/en/products/grp)

⁵³ BASED ON RECENT BGH DATA: [HTTPS://WWW.BALKANGASHUB.BG/EN](https://www.balkangashub.bg/en)

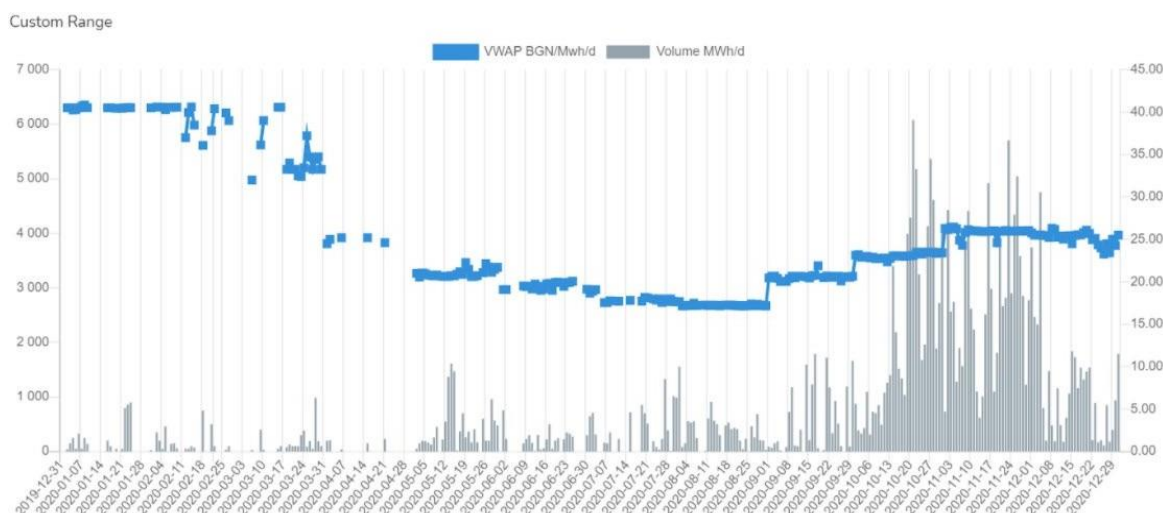


Figure 17. Trade in the intraday segment (BGH)

Source: *Balkan Gas Hub*,⁵⁴ ESP analysis

The results of the new auctions for GRP volumes for 2021 demonstrate, there is a tendency for a stable increase. Only after 5 initial auctions held in November 2020 – January 2021 46 % of the offered volumes was bought. The deliveries are supposed to take place in January – June and September – December 2021. However, more volumes for different months of delivery are expected to be sold soon.

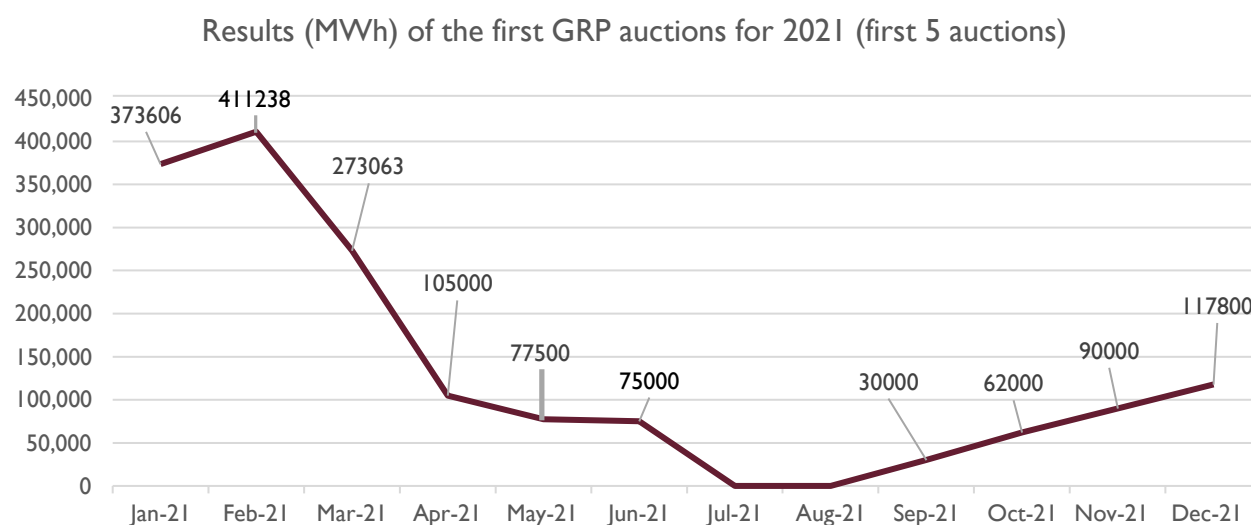


Figure 18. Results (MWh) of the first GRP auctions for 2021 (first 5 auctions)

Source: *Balkan Gas Hub*,⁵⁵ ESP analysis

2.1.2.4. BULGARIA – LESSONS TO BE LEARNT

Thus, the situation with GRP in Bulgaria again demonstrates that such programs may bring some important quick wins that are especially visible for the emerging market, also considering some

⁵⁴ BASED ON RECENT BGH DATA: [HTTPS://WWW.BALKANGASHUB.BG/EN](https://www.balkangashub.bg/en)

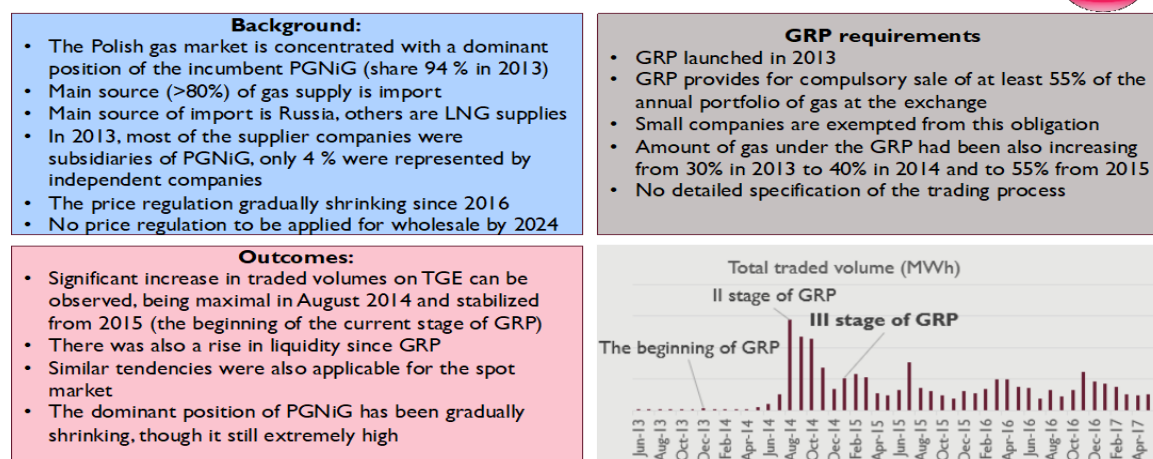
⁵⁵ BASED ON BGH DATA: [HTTPS://WWW.BALKANGASHUB.BG/EN/PRODUCTS/GRP](https://www.balkangashub.bg/en/products/grp)

additional measures, including the establishment of a transparent platform for cleared gas trade as Balkan Gas Hub.

On the other hand, the Bulgarian case again reveals some limitations of many GRPs, i.e., inability to sell a big volume of gas in the newly created market in the absence of necessary demand. However, the increasing volumes of trade on Balkan Gas Hub and better implementation of GRP in 2021 demonstrates that a certain progress is still achievable. Further development of the situation may demonstrate how sustainable this approach to GRP is.

Another interesting conclusion from the Bulgarian case of GRP is the indirect impact that the increase in long- and midterm segments may have on spot markets. As the charts demonstrate, there was a certain increase in trading activity on day-ahead and intraday markets, which coincides with the delivery periods of forward contracts trade on GRP auctions. This is another factor that is worth a particular attention in Ukraine.

2.1.3. POLAND



2.1.3.1. MARKET OVERVIEW

Poland's GRP has been active from 2013, as a part of the country's actions on intensive liberalization of the gas market.

The Polish gas market has been significantly concentrated with a dominant position of the incumbent PGNiG company. At the beginning of GRP's implementation, the share of PGNiG in the market was more than 94% of the overall consumption.⁵⁶ The main sources of gas supply to Poland have been import (constituting more than 80% of all the supply in the last years) with a minor share of domestically produced gas (around 16% of consumption in the last years).⁵⁷

PGNiG group deals with both the domestic and imported gas having a long-term supply contract with Russian Gazprom (since 1996) valid until end of 2022 (the so-called "Yamal contract") covering more

⁵⁶ POLISH ENERGY REGULATORY AUTHORITY (URE) ANNUAL REPORT 2013, P. 10, AVAILABLE AT: [HTTPS://WWW.URE.GOV.PL/EN/ABOUT-US/REPORTS/67/REPORTS.HTML](https://www.ure.gov.pl/en/about-us/reports/67/reports.html)

⁵⁷ MATERIALS PUBLISHED BY PGNIG ON GAS SUPPLY MIX, AVAILABLE AT: [HTTP://PGNIG.PL/AKTUALNOSCI/-/NEWS-LIST/ID/PGNIG-MNIEJ-GAZU-Z-ROSI-ROSNIE-IMPORT-LNG/NEWSGROUPID/10184?CHANGEYEAR=2020&CURRENTPAGE=1](http://pgnig.pl/aktualnosci/-/NEWS-LIST/ID/PGNIG-MNIEJ-GAZU-Z-ROSI-ROSNIE-IMPORT-LNG/NEWSGROUPID/10184?CHANGEYEAR=2020&CURRENTPAGE=1)

than 60 % of all the gas supply. In recent years Poland has been actively diversifying its external supply source (mainly by the new LNG supply agreements concluded by PGNiG with Qatari and US LNG suppliers) and a minor share of the inter-EU gas exchange.⁵⁸

By the beginning of GRP in 2013, most of the supplier companies in Poland were subsidiaries of PGNiG that were created after the first stage of liberalization of the Polish market in 2007.⁵⁹ A very minor share (totally around 4%) was represented by independent companies, ⁶⁰ whose share has been growing since that time. However, the companies of PGNiG group are still in their dominant position in the wholesale and retail market of Poland (having the share of more than 60% in wholesale market and more than 80% in retail market in 2019).⁶¹

The dominant role of PGNiG in Polish gas market is also explained by extensive obligations in the field of security of gas supply that were set in the legislation. In particular, the Polish legislation requires gas suppliers to have a certain level of diversification of supply sources in their portfolio and to maintain mandatory gas reserves. ⁶² These requirements significantly impede the access to the market by alternative suppliers and make more favorable conditions for PGNiG group. Moreover, maintaining PGNiG's dominance is to a large extent explained by a political intervention in the market and backing the company's interests by ruling political party and governmental officials in Poland.⁶³ This is also explained by a significant importance of the issue of diversification of gas supply sources (where PGNiG has its special role) and its utilization in domestic political agenda of Poland. The charts below also demonstrate that many market indicators (e.g., liquidity-related) may also reflect the negative tendencies partly related to political intervention of the ruling party, as a certain decrease of liquidity can be clearly seen since 2015 when an extensive political intervention began.

The price regulation is quite broad in the market, but has been gradually shrinking since 2016, i.e. no price regulation can be applied at the wholesales since that time and the price regulation is to be lifted also for the retail market (including the supply to the households) by 2024.

Eventually, GRP was an important step to foster gas trade on the Polish Energy Exchange (TGE) and new short-term segments of the market on TGE.

2.1.3.2. THE GRP REQUIREMENTS

The GRP is mainly provided in the Energy Law of Poland, which was amendment in 2013. Article 49b⁶⁴ provides for compulsory sale of at least 55% of the annual portfolio of gas at the organized market by the companies that participate in gas trade. This excludes gas necessary for the mandatory stock reserves, technical gas, gas of the own consumption etc. Small companies that import gas into Poland (having booked less than 10% of the total available entry capacities in gas-transmission system) are

⁵⁸ IBID.

⁵⁹ UOKIK (POLISH COMPETITION AUTHORITY) RYNEK GAZU PORADNIK DLA KONSUMENTÓW KRAKÓW, 2013, P. 3
[HTTPS://WWW.UOKIK.GOV.PL/DOWNLOAD.PHP?PLIK=13022](https://www.uokik.gov.pl/download.php?plik=13022)

⁶⁰ POLISH ENERGY REGULATORY AUTHORITY (URE) ANNUAL REPORT 2019, P. 77, AVAILABLE AT:
[HTTPS://WWW.URE.GOV.PL/EN/ABOUT-US/REPORTS/67,REPORTS.HTML](https://www.ure.gov.pl/en/about-us/reports/67,reports.html)

⁶¹ POLISH ENERGY REGULATORY AUTHORITY (URE) ANNUAL REPORT 2019, P. 77, AVAILABLE AT:
[HTTPS://WWW.URE.GOV.PL/EN/ABOUT-US/REPORTS/67,REPORTS.HTML](https://www.ure.gov.pl/en/about-us/reports/67,reports.html)

⁶² NIEWIŃSKI M, K. BĄDYDA, J. KOPĄŁK. FUNKCJONOWANIE POLSKIEGO RYNKU GAZU NA TLE EUROPY. NIERÓWNOŚCI SPOŁECZNE A WZROST GOSPODARCZY, NR 50 (2/2017). P.223.

⁶³ [HTTPS://WWW.GOV.PL/WEB/SRODOWISKO/MINISTER-M-KURTYKA-ZWYCIESTWO-PGNIG-TO-WIELKI-SUKCES-POLSKI-I-WAZNY-DZIEŃ-DLA-NASZEGO-BEZPIECZENSTWA-ENERGETYCZNEGO](https://www.gov.pl/web/srodowisko/minister-m-kurtyka-zwyciestwo-pgnig-to-wielki-sukces-polski-i-wazny-dzien-dla-naszego-bezpieczenstwa-energetycznego)

⁶⁴ BASIC INFORMATION PROVIDED IN DELOITTE REPORT:
[HTTPS://WWW2.DELOITTE.COM/CONTENT/DAM/DELOITTE/RO/DOCUMENTS/NATURAL%20GAS%20TRADING%20OBLIGATIONNS.PDF](https://www2.deloitte.com/content/dam/deloitte/ro/documents/natural%20gas%20trading%20obligations.pdf)

MORE INFORMATION CAN BE FOUND IN POLISH ENERGY LAW (IN POLISH):

[HTTPS://ISAP.SEJM.GOV.PL/ISAP.NSF/DOWNLOAD.XSP/WDU19970540348/U/D19970348LJ.PDF](https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19970540348/U/D19970348LJ.PDF)

exempted from this obligation. The amount of gas under the GRP had been also increasing from 30% in 2013 to 40% in 2014 and to 55% from 2015.

No detailed specification of the trading process and the mechanics of GRP (minimal price, size of lots, standardized products etc.) is provided in Energy Law. The only venue for trade under GRP is the Polish energy exchange – TGE, which has been offering gas trading services since 2012. TGE offers intra-day, day-ahead and commodity derivatives products. Initially PGNiG was unable to sell the intended amount of gas in exchange facing the lack of demand when most of the supply in the market went under the long-term supply agreements with PGNiG and its affiliates. A separate entity was created by PGNiG (PGNiG Obrót Detaliczny sp z oo) to participate in trade and comply with the GRP requirements in 2013.⁶⁵

2.1.3.3. THE GRP RESULTS

From the beginning of GRP in 2013 and more actively from 2014 (August) a significant increase in traded volumes on TGE⁶⁶ can be observed, being maximal in August 2014 and stabilized from 2015 (the beginning of the current stage of GRP).

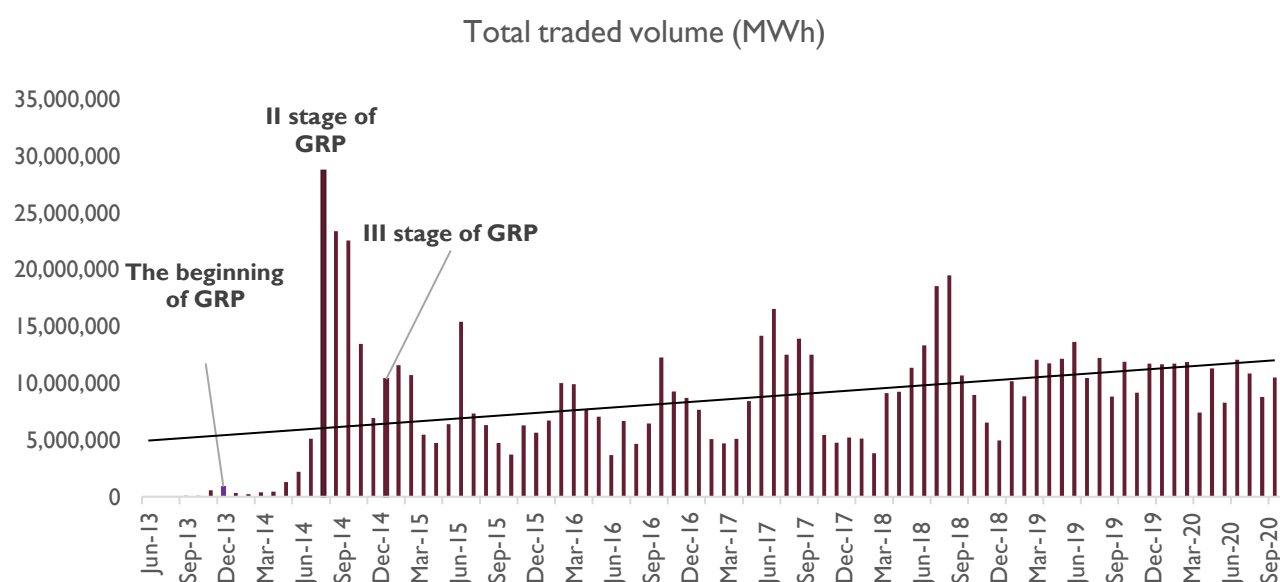


Figure 19. Total traded volume

Source: TGE statistics,⁶⁷ ESP analysis

A similar tendency can be observed in the increase in the number of trades per month on TGE exchange. The last peak in the number of trades has been taking place since Q4, 2018 – Q1, 2019.

⁶⁵ GEORGE FISCHER. GAS RELEASE PROGRAMMES AS AN INSTRUMENT TO IMPROVE GAS MARKET FUNCTIONING. EU4ENERGY HIGH-LEVEL POLICY TALKS 05.10.2018 [HTTPS://ENERGY-COMMUNITY.ORG/DAM/JCR:ECAFCAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF](https://energy-community.org/dam/jcr:ECAFCAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF)

⁶⁶ [HTTPS://TGE.PL/STATISTIC-DATA](https://tge.pl/statistic-data)

⁶⁷ BASED ON TGE STATISTIC DATA: [HTTPS://TGE.PL/STATISTIC-DATA](https://tge.pl/statistic-data)

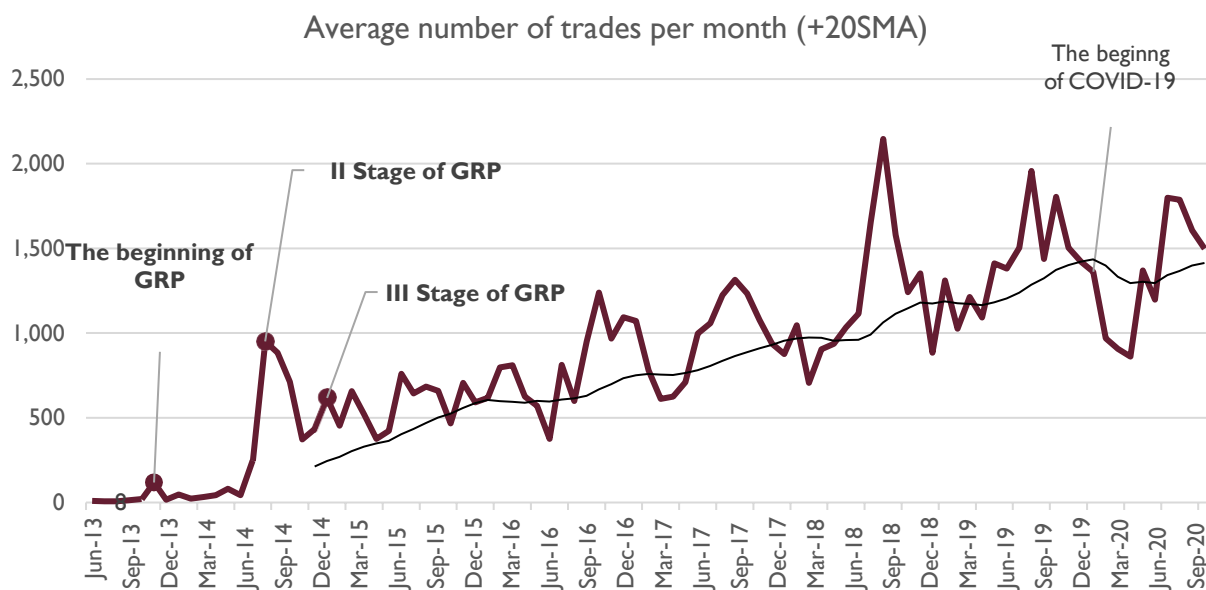


Figure 20. Average number of trades per months

Source: TGE statistics,⁶⁸ ESP analysis

The churn rates⁶⁹ also demonstrate a rise in liquidity in the Polish gas market since the beginning of the GRP in Poland. This is especially visible in the months coming after the increase in volumes for gas release (2014 – 2015). Although the churn rates are still quite low and unstable.

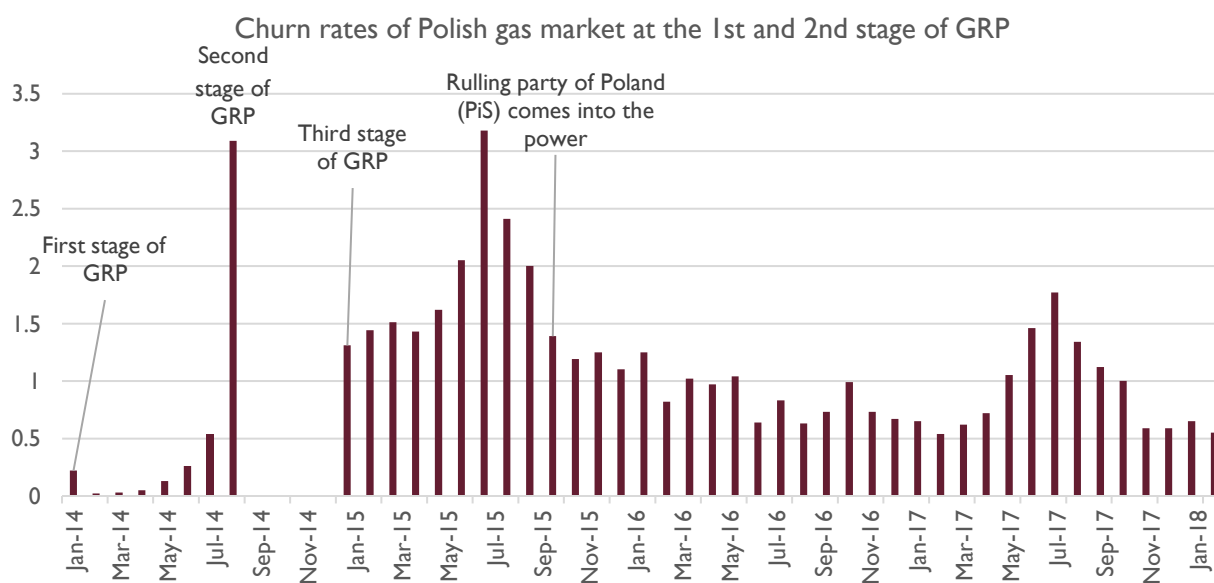


Figure 21. Churn rate of Polish gas market (2014 – 2018)

⁶⁸ BASED ON TGE STATISTIC DATA: [HTTPS://TGE.PL/STATISTIC-DATA](https://tge.pl/statistic-data)

⁶⁹ [HTTPS://EN.GAZ-SYSTEM.PL/CUSTOMER-ZONE/MARKET-CONSULTATIONS/COMPLETED-PROCEDURES/2018/UPDATED-REPORT-ON-INTERIM-MEASURES/](https://en.gaz-system.pl/customer-zone/market-consultations/completed-procedures/2018/UPDATED-REPORT-ON-INTERIM-MEASURES/)

Source: TSO (Gaz-System S.A.) annual reports on BAL NC implementation (2016, 2018),⁷⁰ ESP analysis

Similar tendencies of increase of traded volumes can be observed in the spot market for the same periods of GRP (after 2014 -2015).

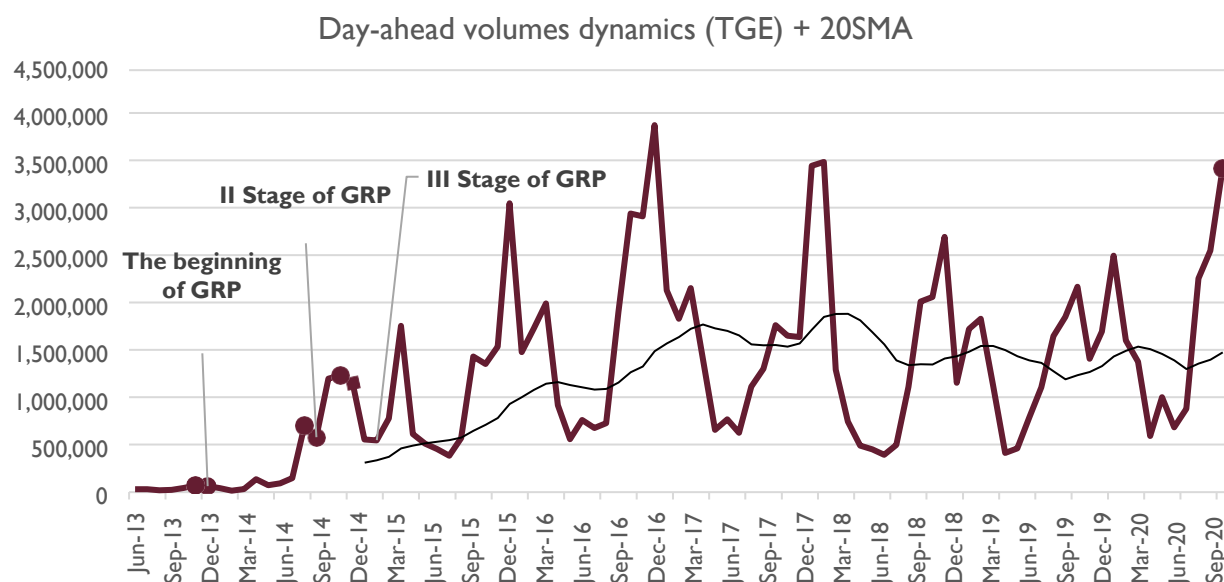


Figure 22. Day-ahead volumes dynamics

Source: TGE statistics,⁷¹ ESP analysis

However, the situation seems to be less dynamic regarding the decrease in share of the incumbent company's (PGNiG) position on the market. Thus, the position of PGNiG has shrunk from 95% in 2013 to 73% in 2019. However, the alternative suppliers (out of the PGNiG group) still constitute a visible minority in the Polish gas market. Thus, the increase in trade on TGE has been supplemented with the simultaneous increase in PGNiG volumes and minor dynamics of the increase in alternative suppliers.

⁷⁰ UPDATED REPORT ON THE INTERIM MEASURES INTRODUCED UNDER COMMISSION REGULATION (EU) NO 312/2014 OF 26 MARCH 2014 ESTABLISHING A NETWORK CODE ON GAS BALANCING OF TRANSMISSION NETWORKS. P. 14 -16

⁷¹ BASED ON TGE STATISTIC DATA: [HTTPS://TGE.PL/STATISTIC-DATA](https://tge.pl/statistic-data)

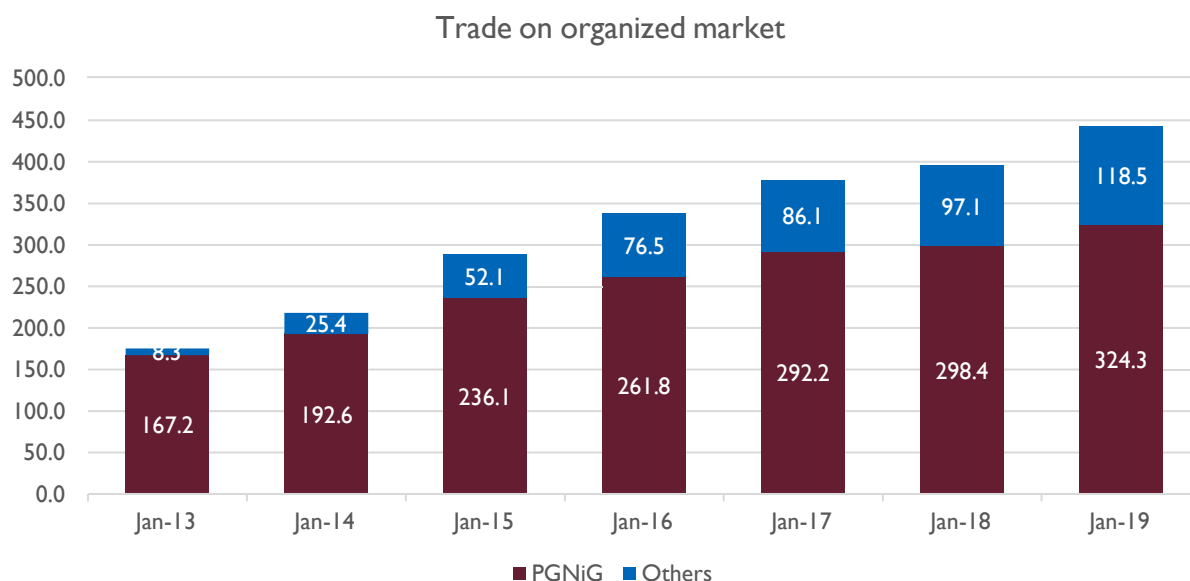


Figure 23. Trade on organized market

Source: Polish NRA (URE) annual reports,⁷² ESP analysis

It is also worth noting that the situation with the dominance of PGNiG in the market of Poland is to large extent determined by the special status this company has with regard to fulfilling functions of securing the energy supply of the country. Polish legislation provides with an extremely extensive obligations for the gas suppliers in keeping necessary gas stocks and geographical diversification of supplies in their portfolio to be able to participate in Polish gas market.⁷³ These provisions make significant barrier for entry to the market by alternative suppliers specially the smaller companies. Whereas PGNiG – the state-owned dominant company with the significant financial resources and access to domestic production, storage and pipeline and LNG gas supplies (having both long-term upstream contracts and procuring some amount of gas on EU hubs), is definitely in a better position with regards to fulfilling the security of supply obligations. This factor, together with the presence of long-term supply contracts of PGNiG Group's companies and consumers led to a slow transformation of the market and a lack of efficiency of GRP in meeting of many goals in developing Polish gas market.

2.1.3.4. POLAND – LESSONS TO BE LEARNT

Therefore, the experience of GRP in Poland also demonstrates that GRPs are in principle capable of improving market liquidity, however, this improvement may be limited if the GRP is not supported by other reforms and political will to transform the conditions of the market. In particular, besides numerous obligations for alternative suppliers (in terms of the necessary gas stocks, geographical diversification of gas supply etc.) constituting a barrier for entry to the market, there is a clear tendency of backing the incumbent PGNiG by political leadership of Poland emphasizing company's role in the energy security of this country. The market indicators above also clearly demonstrate the negative tendencies in the development of the gas market after the leading party (PiS) formed the government in October 2015.

⁷² BASED ON URE'S ANNUAL REPORT: [HTTPS://WWW.URE.GOV.PL/PL/URZAD/INFORMACJE-OGOLNE/PUBLIKACJE/RAPORTY-DLA-KOMISJI-EU/3343,DOK.HTML](https://www.ure.gov.pl/pl/urzad/informacje-ogolne/publikacje/raporty-dla-komisji-eu/3343,dok.html)

⁷³ NIEWIŃSKI M, K. BĄDYDA, J. KOPĄŁK. FUNKCJONOWANIE POLSKIEGO RYNKU GAZU NA TLE EUROPY. NIERÓWNOŚCI SPOŁECZNE A WZROST GOSPODARCZY, NR 50 (2/2017). P.223.

Thus, Poland's GRP itself didn't result in a complete transformation of the market and a radical shrinking of the incumbent's position, though some level of diversity was brought to the market. The example of Poland and problems with implementation of GRP at the initial stage when PGNiG's subsidiaries were the only able entities to procure gas on exchange also identifies problems with the access of alternative suppliers to the resource of incumbent companies in the highly concentrated markets.

This aspect of implementation of GRPs is especially relevant to Ukraine, where the dominant Naftogaz company also has many similar obligations in security of supply and better access to some infrastructure, domestic resources and foreign markets. Therefore, it is important to develop the model of the market, where the supply is secured in a less market restrictive way and without creating additional barriers for entry. In such a model of the market the GRP is likely to provide with better outcomes for increasing liquidity and developing competition.

2.2. THE HISTORICAL CASES OF GRPS

Besides the ongoing GRPs, in Central and Eastern Europe, there were several completed cases of GRPs. Most of these GRPs took place in the West European markets in the early stages of their liberalization. However, there were some cases in other regions, including Central and Eastern European countries, i.e. Hungary. The common feature of these GRPs is that their purpose was to leverage the position of the dominant companies, especially the cases of acquisition of significant assets in the national markets which led to the increasing risk of abuses of dominant position.

<p>Hungary (2004 – 2012):</p> <ul style="list-style-type: none"> • Aimed at preventing E.ON/MOL's from acquiring dominant position and start gas market liberalization • Annual auctions of 0.5 -1 bcm of MOL's imported gas • Annual quantities divided in several categories of lots, starting price was lower than WACOG and verified by Regulator; large consumers could participate • GRP led to some positive outcomes in changing the structure of the market and increasing liquidity. 	<p>Germany (2003 – 2008):</p> <ul style="list-style-type: none"> • A condition of E.ON's acquisition of Ruhrgas • 200 TWh to be offered within 6 years with an annual amount of 33 TWh; • Companies with a significant E.ON's share were forbidden to participate • Starting price was based on the average border price and later linked to Rotterdam traded oil products; • Participation increased after 2007 when traders were allowed to resell amounts in more liquid areas.
<p>Spain (2001 – 2003):</p> <ul style="list-style-type: none"> • Approx. 25% of volumes contracted by Gas Natural with North-African suppliers was released. • Candidates had to meet numerous requirements. • The price was based on the cost of supply and some additional fees • GRP was criticized for barriers to participate; only 6 companies were eventually allowed to bidding. 	<p>The UK (1992 – 1996):</p> <ul style="list-style-type: none"> • 500 million therms (approx. 14.6 TWh) from British Gas plc contracts • The starting price was based on WACOG and some other mandatory payments. • Opened to all the interested parties and the volumes were provided on spot market. • Had a positive effect on price decrease and market stimulation.

2.2.1. HUNGARY (2006 – 2014)

2.2.1.1. MARKET OVERVIEW

The Hungarian GRP began during the initial stage of liberalization of the market (when the market was divided into 'liberalized' and 'regulated' segments since 2004) and was related to the acquisition of MOL company's subsidiaries (including company's shares in Panrusgaz company, which was involved in gas imports from Russia, MOL's wholesale supplier company and storage operator) by E.ON.⁷⁴ As a result, E.ON company obtained a dominant position on Hungarian gas market. Thus, the gas release

⁷⁴ MERGER CASE BY THE COMMISSION NO COMP/M.3696 E.ON/MOL, P. 3 – 5, AVAILABLE AT: [HTTPS://EC.EUROPA.EU/COMPETITION/MERGERS/CASES/DECISIONS/M3696_20051221_20600_EN.PDF](https://ec.europa.eu/competition/mergers/cases/decisions/M3696_20051221_20600_EN.PDF)

program was among the requirements of the approval of merger by the Commission. It aimed at enabling alternative wholesale supplier-companies to obtain a certain amount of imported gas (0.5 – 1 bcm in different years) that constituted up to 14 % of the overall domestic demand.⁷⁵

2.2.1.2. THE GRP REQUIREMENTS

GRP was designed and approved by the Commission with the consideration of lessons from some previous cases in Western EU markets and EFET's recommendations and in consultations with market participants.

The gas was offered under annual contract auctions with a quantity of 0.5 bcm in 2006/2007 and then 1 bcm up until the end of the GRP. This quantity was divided into 5 lots of 100 mcm, 5 lots of 50 mcm and 10 lots of 25 mcm each year. These size and number of lots were designed with regard to specificity of Hungarian market and needs of market participants.⁷⁶ The contracted gas was delivered over two years at the two Hungarian entry points. The starting price was based on 95 % of WACOG calculations verified by the Regulator. Product flexibility was also provided. E.ON/MOL affiliates were not allowed to participate.

It is also worth noting that purchases from GRP was available for large customers, who could do it directly or indirectly from a trader purchasing gas in the gas release program. Such customers had the opportunity to terminate their existing gas supply contracts or to reduce their obligation to purchase gas,⁷⁷ which was important to stimulate competition at early stage when most of supplies in domestic market were conducted under long-term contracts with MOL or designated regional distribution companies.⁷⁸

2.2.1.3. RESULTS AND LESSONS OF THE GRP

The Hungarian GRP enabled participation of some of the alternative suppliers in the Hungarian market. The shares of the market participants had been quite changeable in the period of implementation of GRP. Eventually, state-owned MVM became a dominant player at the wholesale market, also acquiring some of E.ON shares in 2015.

The case of Hungarian GRP is quite specific, as it had been established in the period when both the EU and Hungarian gas markets were at a different level of liberalization compared to the current conditions. Moreover, its introduction combined different aims: a prevention of the dominance of one company as a condition for acquisition of MOL company by E.ON (merger control) and kick-starting the competition in the emerging and undeveloped market. Nevertheless, considering a long period for GRP implementation, which supported the transformation of the market, this example can still provide with some important insights for further application. In particular, an effective cooperation between the market participants and Regulator in the process of GRP, including the design of GRP products according to the market needs and updating the conditions for GRP based on the situation in the market is definitely a positive experience that may be also utilized in the course of market reform in Ukraine.

⁷⁵ SEE MORE DETAILS IN G. FISCHER'S PRESENTATION (2018) ON GRPS IN EUROPE, P.14: [HTTPS://WWW.ENERGY-COMMUNITY.ORG/DAM/JCR:ECAFAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF](https://www.energy-community.org/DAM/JCR:ECAFAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF)

⁷⁶SEE MORE DETAILS IN THE PAPER IN COMPETITION POLICY NEWSLETTER (2006): [HTTPS://EC.EUROPA.EU/COMPETITION/PUBLICATIONS/CPN/2006_1_73.PDF](https://ec.europa.eu/competition/publications/cpn/2006_1_73.pdf)

⁷⁷ IBID., P.81

⁷⁸ COMMISSION DECISION OF 21 DECEMBER 2005 DECLARING A CONCENTRATION COMPATIBLE WITH THE COMMON MARKET AND THE FUNCTIONING OF THE EEA AGREEMENT (CASE COMP/M.3696 — E.ON/MOL), PARA 81. AVAILABLE AT: [HTTPS://EUR-LEX.EUROPA.EU/LEXURISERV/LEXURISERV.DO?URI=CELEX:32006D0622:EN:HTML](https://eur-lex.europa.eu/lexuriserv/lexuriserv.do?uri=CELEX:32006D0622:EN:HTML)

2.2.2. GERMANY (2003 – 2008)

2.2.2.1. MARKET OVERVIEW

Germany's GRP was a condition of the governmental merger approval during E.ON's acquisition of Ruhrgas company and concerned the volumes under import long-term supply contracts. The total volume for release constituted 200 TWh to be offered within 6 years with an annual amount of 33 TWh. This annual amount (33 TWh) constituted approx. 4 to the average annual consumption in Germany, which was around 879 TWh in this period.⁷⁹

The main reason for the introduction of the GRP was the need to prevent concentration on the market and stimulate competition.

2.2.2.2. THE GRP REQUIREMENTS

Gas released via yearly auctions offering 33 lots per auction and 2 different delivery points were provided. Certain degree of flexibility of the contracts was also provided (minimum annual quantity to be purchased - 80 %; daily - 60 %). Companies with a significant E.ON's share were forbidden to participate. The provision of bank guarantee was another precondition for participation in GRP. The approach to determining starting price had changed several times and included the calculation based on the average border price, as well as the linkage to Rotterdam traded gas oil and fuel oil products (later).

2.2.2.3. RESULTS AND LESSONS OF THE GRP

The early auctions were not successful, e.g., about 50% of lots were sold during the first auction in 2003, where only two participants bought these volumes (namely, BP and Energi E2).⁸⁰ The price was initially based on the average border price and in later auctions also linked to Rotterdam traded gas oil and fuel oil products.⁸¹ This, however, did not prevent from situations when the final price after the bids on the German GRP auctions was sometimes still higher than in neighboring markets, especially in early auctions when many cross-border gas exchange from neighboring markets was still complicated for many of the suppliers.⁸² Another issue, which participants of the early auctions faced, was the situation when the seller didn't guarantee firm delivery of the procured gas to remote areas, which led to the risk of stranded gas for some of the suppliers.⁸³

Later the participation increased, when some amendment to pricing and other conditions were made (including lowering of the necessary amount covered by bank guarantee). Participation in auctions significantly increased in the last year (after 2007), also due to establishment of the virtual trading point in Germany and introduction of entry/exit system by TSO, which allowed traders to resell these amounts in more liquid European market areas.⁸⁴

⁷⁹ (APPROXIMATELY EQUAL TO 90 BCM) [HTTPS://WWW.STATISTA.COM/STATISTICS/703657/NATURAL-GAS-CONSUMPTION-GERMANY/](https://www.statista.com/statistics/703657/natural-gas-consumption-germany/)

⁸⁰ Ibid.

⁸¹ [HTTPS://WWW.ENERGY-COMMUNITY.ORG/DAM/JCR:ECAFCAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF](https://www.energy-community.org/dam/jcr:ECAFCAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF)

⁸² HEIKO LOHMANN (2006), THE GERMAN PATH TO NATURAL GAS LIBERALISATION: IS IT A SPECIAL CASE? OXFORD INSTITUTE FOR ENERGY STUDIES, P. 124 - 125

⁸³ Ibid.

⁸⁴ HEIKO LOHMANN (2009), THE GERMAN GAS MARKET POST 2005: DEVELOPMENT OF REAL COMPETITION, OIES WORKING PAPER, P. 99 AVAILABLE AT: [HTTPS://ORA.OX.AC.UK/OBJECTS/UUID:900DA837-0A8C-46F4-855F-46288F4B4574/DOWNLOAD_FILE?FILE_FORMAT=PDF&SAFE_FILENAME=NG33.PDF&TYPE_OF_WORK=WORKING+PAPER](https://ora.ox.ac.uk/objects/uuid:900DA837-0A8C-46F4-855F-46288F4B4574/DOWNLOAD_FILE?FILE_FORMAT=PDF&SAFE_FILENAME=NG33.PDF&TYPE_OF_WORK=WORKING+PAPER)

The auctions under GRP had some positive effect on the competition in the market, especially in some areas of Germany; however, the overall effect was significantly decreased by the tendency to reselling the volumes out of the German market at the later stage.⁸⁵

The GRP in Germany, same as many other historical examples of GRPs, was implemented under different market conditions and, hence, may not provide much insight for the mechanics and mode of organization of GRP in Ukraine. However, this example demonstrates some important aspects and particular approaches that may be considered for GRP in Ukraine. For instance, the German case explicitly demonstrated the importance of integration with EU markets for price discovery in such programs, which may create a natural threshold for the level of prices. Whereas the regulatory measures to keep the competitive level of prices (e.g., price floors) may not be feasible when there is no active cross-border gas exchange. Moreover, there is a need for not allocating any additional risks on buyers, as it may also impede the GRP process. The risks of non-delivery (as it was in the case of early GRP auctions in Germany) is not relevant anymore in conditions of delivery to the single VTP; however, some other risks and costs are still possible to be allocated on buyers in the case of Ukraine (e.g., allocating the costs of storage of previously unprocured gas, as it was suggested in some of the Ukrainian draft laws on GRP – 4400, 3958 etc.), which should be avoided. Eventually, the GRP in Germany also demonstrated that GRP's dynamics and behavior of its participants is dependent on the other conditions of market development and thus it is apparent that GRP can't be the single driver of market transformation itself.

2.2.3. SPAIN (2001 – 2003)

2.2.3.1. MARKET OVERVIEW

The Spanish GRP made up approx. 25% of the amount under the long-term supply contracts of Gas Natural Company procured from the North African external suppliers. This constituted around 9% of the overall domestic consumption. The idea behind the GRP was to provide some access and additional incentives for alternative suppliers to the industrial consumers in the Spanish market.

2.2.3.2. THE GRP REQUIREMENTS

Gas was released via a tender process whereby candidates had to meet several conditions to be allowed to participate. The price was based on the cost of supply and some additional fees. A list of criteria had to be met by the potential participants (including the number of customers, their distribution, portfolio etc.) in order to be allowed to participate in GRP.

2.2.3.3. RESULTS AND LESSONS OF THE GRP

6 companies (out of 14 bids and 9 shortlisted) were allocated with different volumes under GRP (from 2% up to 25% of the announced volume); the process raised some criticism as for the very limited possibilities for the new and non-Spanish companies.⁸⁶ At the end of day, some positive shifts in the wholesale could be identified after the GRP: the incumbent Gas Natural's share had shrunk from more than 80% in 2001 to 55% in 2003 and several other companies entered the market.⁸⁷

Despite certain improvements brought by the GRP, the Spanish case seems to be quite controversial from the point of view of its transparency and access by market participants. In particular, the criticism

⁸⁵ IBID.

⁸⁶ IMPLEMENTATION OF GAS RELEASE PROGRAMMES FOR EUROPEAN GAS MARKET DEVELOPMENT (PAPER BY EFET), P. 6, AVAILABLE AT:
[HTTPS://EFET.ORG/FILES/DOCUMENTS/INTERNAL%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%20%20\(1\).PDF](https://efet.org/files/documents/internal%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%20%20(1).PDF)

⁸⁷ [HTTPS://EFET.ORG/FILES/DOCUMENTS/PRESS/ENERGY%20TRADING%20ANALYSES/THIRD%20PARTY%20PUBLICATIONS//PRESENTACION%20CNE.PDF](https://efet.org/files/documents/press/ENERGY%20TRADING%20ANALYSES/THIRD%20PARTY%20PUBLICATIONS//PRESENTACION%20CNE.PDF)

of the procedure and limitations for participation negatively affected the credibility of this GRP and some visible artificial barriers for participation make it different from many other GRPs. This is to be also acknowledged in Ukraine in the design of the program, which should be aimed at maximal involvement of the participants than developing additional barriers to entry.

2.2.4. GREAT BRITAIN (1988 – 1996)

2.2.4.1. MARKET OVERVIEW

The beginning of GRP in the Great Britain is directly related to market liberalization that began already in 1980s (earlier than in the majority of the other European countries). The evolution of the national legislation, market rules and corporate structure of the incumbent company back in that early days of GB's market liberalization provide many important insights on the way GRP should be combined with other important steps in the development of gas market. Hence, the previous British Gas Corporation (BGC) lost its legal monopoly on access to gas of the domestic production and was privatized (and transformed into British Gas plc.) with the changes in the legislation (namely new Oil & Gas Enterprise Act and Gas Act) in 1982 – 1986. Gas Act (1986) also removed company's exclusive rights on supply of the large industrial customers (over 25,000 Therms per annum) and established sectoral regulator – Ofgas.⁸⁸ Later, in 1988 certain quotas on contracting gas on the market by British Gas plc (90%) was established by the Monopolies and Mergers Commission (MMC) and in 1990 British Gas plc unbundled three of its activities (transportation and storage, supply and production). Thus, in fact, the majority of the necessary preconditions for effective GRP had been established in advance, which also included some of limitations for British Gas plc supply in the market.⁸⁹ The active cooperation between gas regulator, national competition authority, market participants and policymakers is another important feature of gas market liberalization on Great Britain.

The GRP itself factually began with the British Gas plc commitment to limit its purchase from upstream consumers and limiting its market share in 1988. Later, in 1992 some exact quotas for GRP were established in the agreement with the MMC. Around 500 million Therms (approximately 14.6 TWh or 1.49 bcm) per year in the years 1994 – 1996 were offered by British Gas plc from its long-term contracts. This amount constituted less than 3 % of the average gas consumption in the GB in these years.⁹⁰ Later, the factual release of gas by British Gas plc increased up to 19 %. The idea of GRP was related to the ongoing development of the wholesale market and providing access to gas resources to the alternative suppliers.

2.2.4.2. THE GRP REQUIREMENTS

Each annual tranche of gas was divided in several parts to be offered in auctions on wholesale basis.⁹¹ The starting price was based on WACOG (weighted average cost of gas) and some other mandatory payments. The participation was opened for all the interested traders, however, with the approval by Ofgas. The number of participants had been growing in the first auctions; however, the number of participants was inflated due to multiple bids submitted by them for the purpose of reselling the

⁸⁸ PATRICK HEATHER (2010). THE EVOLUTION AND FUNCTIONING OF THE TRADED GAS MARKET IN BRITAIN, OIES, NG 44 <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG44-THEEVOLUTIONANDFUNCTIONINGOFTHETRADEDGASMARKETINBRITAIN-PATRICKHEATHER-2010.PDF>

⁸⁹ IBID.

⁹⁰ SEE MORE DETAILS IN G. FISCHER'S PRESENTATION (2018) ON GRPS IN EUROPE, P.18: <https://www.energy-community.org/dam/jcr:ECAFAC9-4A94-404C-BAB4-9731E777497D/EU4ENERGY%20HLT%20-%20GAS%20RELEASE%20PROGRAMMES%20181005%20WECOM%20FINAL.PDF>

⁹¹ MICHAEL STOPPARD (1993), COMPETITION AND REGULATION IN THE GAS INDUSTRY: AN EVALUATION OF THE MCC REPORT ON GAS IN THE UK, OXFORD INSTITUTE FOR ENERGY STUDIES, AVAILABLE AT: <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/SP4-COMPETITIONANDREGULATIONINTHEGASINDUSTRYANEVALUATIONOFTHEMMCREPORTONGASINTHEUK-MSYOPPARD-1993.PDF>

procured amounts to other companies (this was particularly the case with the company United Gas and its subsidiaries). This was considered undesirable, and the conditions were tightened.⁹²

2.2.4.3. THE GRP RESULTS AND LESSONS TO BE LEARNT

The GRP found feedback and a significant number of independent companies took part in the auctions, though the number decreased after the conditions for participation were tightened. This process was also accomplished by the active development of the spot market in the GB, after the network codes and relevant standardized products were established in 1996 (before trades were OTC only), and the overall tendency of price decrease and shrinking of the incumbent company's share in the market.⁹⁴ British Gas plc market share had declined from 97% in 1990 to 29% in 1996. Thus, despite being outdated, the GB case of GRP may provide with some important insights also relevant today, including the necessity of efficient cooperation between the national competition authority, regulators, policymakers and market participants with the aim of transformation of the market architecture and effective decrease of the incumbent's share. Moreover, same as in many other examples provided in this paper, the GB one demonstrates that the success of GRP also significantly depends on successful combination of GRP with other market reforms aimed at stimulating competition.

⁹² [HTTPS://EFET.ORG/FILES/DOCUMENTS/PRESS/ENERGY%20TRADING%20ANALYSES/THIRD%20PARTY%20PUBLICATIONS//PRESENTACION%20CNE.PDF](https://efet.org/files/documents/press/energy%20trading%20analyses/third%20party%20publications//PRESENTACION%20CNE.PDF)

⁹³ [HTTP://DOCUMENTS1.WORLDBANK.ORG/CURATED/EN/158051468760578549/124524322_20041117180613/ADDITIONAL/MULTI-PAGE.PDF](http://documents1.worldbank.org/curated/en/158051468760578549/124524322_20041117180613/ADDITIONAL/MULTI-PAGE.PDF) P.15

⁹⁴ IMPLEMENTATION OF GAS RELEASE PROGRAMMES FOR EUROPEAN GAS MARKET DEVELOPMENT (PAPER BY EFET), P. 5, AVAILABLE AT: [HTTPS://EFET.ORG/FILES/DOCUMENTS/INTERNAL%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%20%20\(1\).PDF](https://efet.org/files/documents/internal%20energy%20market/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%20%20(1).PDF)

3. CONCLUSIONS AND CONSIDERATIONS FOR GRPS IN UKRAINE

Based on the evidence and precedence illustrated in numerous countries, ESP firmly believes the GRP will have significant positive impacts on Ukraine's gas market development and will be a fundamental enabler going forward, benefits include:

1 Equal access to gas	<ul style="list-style-type: none">• UGV volumes will be made available to traders and suppliers (& DH) on competitive basis □ stimulating competition and market participation.• Mandatory Annual Contracts □ worsening access to gas for alternative suppliers, as large volumes are to be booked by incumbents
2 Stimulate wholesale market (liquidity)	<ul style="list-style-type: none">• GRP have demonstrated precedent of increasing liquidity in other countries.• Consolidating existing UTC volume to a centralized competitive market □ improved transparency □ attract more participation (competition).
3 Increase transparency + Price Discovery	<ul style="list-style-type: none">• GRP conducted on licensed platform, on competitive and transparent basis □ increased price discovery leading to price indexation.• UTC trades □ made transparent and clear for the market.
4 Development of Standardized Long Term Products (SLTP)	<ul style="list-style-type: none">• SLTP facilitated □ demand of MPs □ enabling competitive environment.• Increased primary and secondary activity, as well as retail competition (assuming other conditions met).

3.1. CONSIDERATIONS TO BE MADE WHEN INTRODUCING A GRP

Prior examples of GRPs implemented demonstrate the two-fold nature such program may have and possible 'side-effects', in case if GRP is not supported by other important activities or organized in a non-transparent and non-inclusive way. Moreover, many of the analyzed GRPs, including the ongoing ones, haven't led to achieving of all the expected benefits or brought only limited positive impact on liquidity, competition, and overall development of the market due to some shortcomings in the process of their introduction.

The most widespread problems in organizing previous and ongoing GRPs in the countries analyzed include:

- 1) **Overregulation:** Overregulation of the process, which departs GRP from the actual needs of the market. As the preliminary results of some GRPs (e.g., Romania, Bulgaria) demonstrate, such an approach may not lead to a significant transformation of the market and bring only some limited improvements to liquidity, competition, and stabilization of prices; on the other hand, it also risks making more favorable conditions for some particular market players. Consequently, setting the rules and requirements within GRP shall be coordinated with the expectations and actual needs of the market and be more flexible to allow solving the problematic issues that may occur in the course of implementation of GRP.
- 2) **Lack of offtake by the market:** Inability of the market to absorb the offered amount of gas under GRP. This problem was noticed in several GRPs, both ongoing and previous cases (Bulgaria, Poland, Germany). There may be different reasons for such a negative outcome, including the lack of demand, non-transparent price formation, lack of independent suppliers etc., but in any of these cases the situation results in a lack of efficiency of GRP. Again, a better cooperation with market participants, including the potential newcomers, and considering their expectations in preparing the GRP is likely to help to avoid this issue. The stimulation of competition, including the competition at retail level, is also likely to prevent the situations of the lack of demand within GRP.

- 3) **Regulated price floors:** Setting regulated price floors for GRP auctions may not guarantee the adequate price level; whereas the interconnection and cross-border exchange with developed EU gas hubs can serve as a better natural long-term ‘regulator’ of the price. This tendency is apparent from some of the early GRPs, e.g., Germany, where despite the attempts to regulate price to the competitive level with neighboring markets, the better price conditions were established only after the increase of cross-border exchange with the other EU market areas. Similarly, the average prices in Romania have decreased and have been more correlated with the average prices on EU gas hubs, when the CEGH component was included to the price formulae. However, this later approach may not be sustainable in the long run, if the Romanian gas market remains significantly isolated from other EU markets.
- 4) **Risks in the concentrated market:** Conducting a GRP in the market which is largely dominated by one company (a group of companies), having a special status by law or regulatory decisions (a sort of ‘legal monopoly’) or by abusing the dominant position may not be efficient enough in terms of increasing the competition in the market. The case of Poland seems to be the most prominent one in this regard, where the situation with the concentration of the market hasn’t changed significantly and GRP couldn’t be even conducted without obliging dominant company’s affiliates to buy out significant amounts of gas. Therefore, GRP shall be also supplemented with active enforcement of competition provisions and eliminating anticompetitive practices, as well as developing a prudent approach to the regulation of the market. The efficiency of GRP is to be also increased by the effective oversight of the market.
- 5) **Limits on participation:** Limiting the participation in GRP, e.g., by setting numerous additional requirements to market participants, may also result in deteriorating the GRP and worsening its credibility. The case of Spain is the example of such a GRP, where the incumbent faced a significant criticism in terms of the transparency of organizing the process.
- 6) **A need for coordination with competition law enforcement:** Effective combating of the incumbents’ dominant position and possibilities to influence the market in a holistic cooperation between the regulator, competition authorities, policy-makers and market participants with ensuring unbundling of both the transportation/distribution and production segments from the supplier-company, as the British example demonstrates, may be an extremely important step for ensuring the efficiency of GRP and visible liberalization of the market.

Therefore, considering the international experience and situation in the Ukrainian gas market, ESP suggests that GRP shall be based on the following principles and conducted with providing the following enablers:

- Explicit goals that the GRP is expected to provide shall be outlined and broad consultations (in the most efficient way) with the market participants shall be conducted. The phases and amounts of gas offered within GRP are to be clarified in this dialogue. The needs of the potential newcomers to the Ukrainian market and alternative suppliers (those who are not affiliated to any of the dominant companies in Ukraine) are to be provided with an especial attention.
- The legal and regulatory provisions for GRP are to provide only basic requirements, whereas the mode of organizing GRP and the detailed rules are to be established by Regulator and based on the views of the market participants. The rules shall have a certain degree of flexibility and there may be some limited regulatory interventions to solve the issues that may arise during the GRP.

- There is likely no need for establishing price floors and regulated price formulas in the case of GRP in Ukraine, as the Ukrainian market is sufficiently integrated with EU one and the price dynamics there is likely to create a 'natural' reference point for the prices, however the initial GRP could include such provisions for extremities in price movement beyond reasonable levels.
- GRP shall be considered as an instrument of the overall gas market reform, but not as a sort of a 'silver bullet' able to solve all the problems of the market. Thus, it shall be accomplished with the other important reforms in eliminating anti-competitive practices, stimulating wholesale and retail competition, and establishing an effective market oversight. Some of the excessive state interventions (e.g., setting price caps for market participants or selling-purchasing obligations) may also have a negative impact on GRP in Ukraine by significantly limiting the possibility to release gas under market conditions.
- The necessary transparent trading venues (exchanges and OTC platforms) shall be licensed and compliant with the necessary transparency and reporting standards and provide with the variety of standardized products to enable effective GRP. Thus, it is recommended to finalize the licensing process of the exchanges and OTC platforms and facilitate the development of standardized products before the beginning of GRP. Some other preparatory work, e.g., enabling market oversight in terms of the REMIT, would also contribute to the efficiency of GRP. Otherwise, a risk of abuses in trade of the large amounts of gas would significantly increase, which jeopardizes not only the efficiency of GRP, but also the credibility of this program.
- There shall be no general limitations for participation in GRP and some restrictive measures may be introduced only in case if some problematic issues and abuses occur in the course of GRP.
- The state-owned gas producers shall not be limited in their access to spot market during the GRP, as some examples also demonstrate that this segment of gas market may be significantly facilitated together with the mid- and long-term segments during the GRP.
- Special auctions for district heating companies may be envisaged at the beginning of GRP (separate from the rest of the volumes) to allow better transition from PSO regime and foster the development of necessary standardized products and trade on the platform.
- AMCU, NEURC and the Government shall effectively cooperate to ensure the absence of abuses by the incumbent companies. The unbundling of UGV from Naftogaz is to be considered as well. Given a significant time needed for this, ensuring the effective operational independence of UGV may be considered as the first step during GRP.

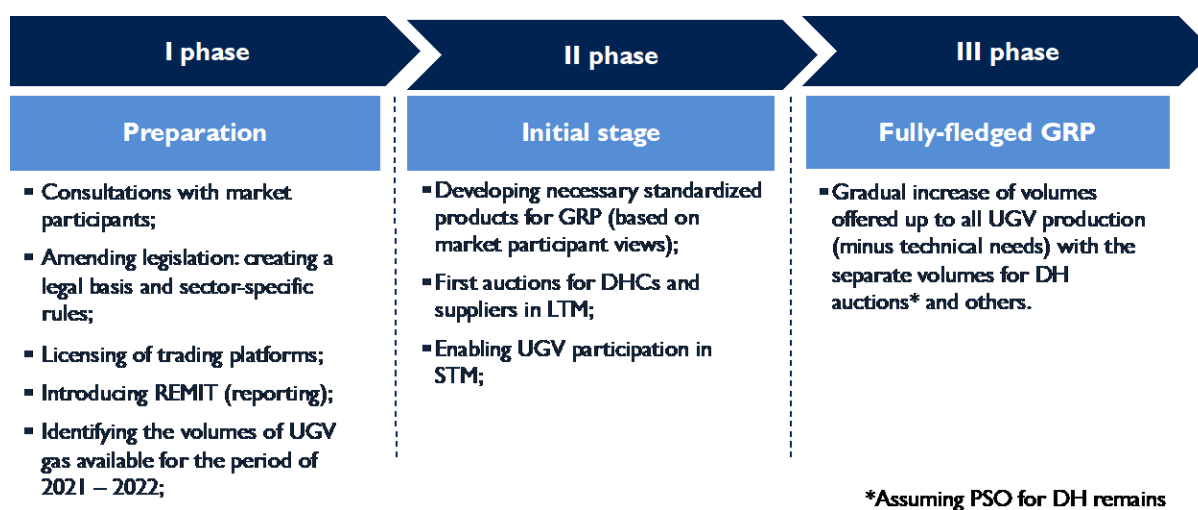
Some of the main considerations and possible challenges of GRP are provided in the chart below.

Considerations	Challenges
 Needs of market participants: with regards to volumes, products, technicalities of auctions etc...	 Lack of uptake: Possible lack of demand / inability of market to absorb GRP volumes.
 Political will: The importance of strong political will and avoiding creation of accidental /deliberate barriers to participation.	 Market abuse: Possible market abuses may undermine GRP benefits and credibility.
 Volume of gas released: The appropriate volume of UGV gas to long /mid-term and spot market.	 Government intervention: Excessive governmental interventions to the market may impede progress brought by GRP.
 DH needs: Separate auctions for DH needs, where bespoke conditions may be provided.	 Strength of Regulator: Limitations of regulatory monitoring and enforcement.
 Ensuring of preconditions: licensed trading venue; necessary standardized products; effective market oversight.	 Licensed platform: The lack of licensed trading platform and clearing may complicate implementation of GRP.

3.2. WAY FORWARD FOR IMPLEMENTATION

GRP is expected to foster the transformation of both wholesale and retail (for all types of supply, including the DH) segments of gas market of Ukraine, development of necessary market infrastructure and liquidity, create favorable conditions for the alternative suppliers and support general moving towards the liberalized model of gas market in Ukraine.

More details on the current gaps and possible sequence for organization of GRP that ESP suggests acknowledging in the design of GRP in Ukraine are provided in the chart below.



Thus, the process is proposed to be organized in three stages:



- A. **The preparatory stage**, when all the necessary legal/regulatory preconditions, as well as transparency and reporting standards (provided in licensing requirements) for trading platforms are to be established and the necessary consultations with market participants are organized. The identification of the exact volume of gas to be released, taking into account volumes already booked by the suppliers considering mandatory annual contracts, in the next stages is another important task to be done at this stage.

- B. **The initial stage**, when first general and special (for DH companies) auctions are to be organized and necessary standardized products are to be provided based on the suppliers needs.
- C. **The advanced stages (fully-fledged GRP)**, when all the UGV production is offered for auctions with or without maintaining special auctions for DH companies (based on the situation on the market).

Several options for kick-starting the GRP can be suggested, including the amendments to legislation (governmental decisions) or by the requirement of AMCU in a framework of combating possible Naftogaz's abuse of the dominant position.

Both of this option may have their pros and cons and the international experience demonstrates that GRP can be organized in either of these ways. Thus, the best approach for Ukraine is to be determined in the discussion with stakeholders, taking into account all the benefits and risks associated with these options.

The chart below provides a preliminary assessment of these options.

 By primary/secondary legislation/CMU decision	 AMCU Pressure
<ul style="list-style-type: none"> Verkhovna Rada amends key laws to provide an obligation for state-owned producers to offer gas in GRP. 	<ul style="list-style-type: none"> AMCU can take a decision on obliging Naftogaz/UGV to offer gas for GRP as an action to prevent abuse of dominant position.
<ul style="list-style-type: none"> CMU/NEURC adopts the relevant decision to oblige state-owned gas producers to offer gas in GRP after the primary legislation is amended. 	<ul style="list-style-type: none"> A similar approach was involved in recent case of Nadra Yuzivska LLC acquisition.
<ul style="list-style-type: none"> CMU as the holder of 100% shares of Naftogaz (on behalf of the state) can take an obligatory decision for Naftogaz for enabling UGV participation in GRP. 	<ul style="list-style-type: none"> GRP was introduced as a part of antitrust proceedings in many previous cases in Europe (GB, Germany, Hungary).
Risk: a potentially lengthy process of decision-making	Risk: possibility to challenge AMCU decision in court

The exact timeline and procedure of GRP are still to be clarified with the relevant stakeholders in Ukraine. ESP suggests starting the high-level discussion on GRP and taking necessary steps in the shortest time possible. Some of the important milestones and requirements are summarized in the table below.

Table 1. Regulatory/Legislative Checklist - Questions & Answers

Q&A REGULATORY/LEGISLATIVE CHECKLIST		
QUESTION	ANSWER	COMMENTS/IMPLICATIONS
Are the final goals of the GRP clearly defined and measurable indicators suggested in the legislative and other proposals for GRP application?	Currently, the suggested options for GRP (in drafts laws, position papers ⁹⁵) do not contain many concrete details on the expected outcome of GRP, covering too many aims and/or abstract assumptions ('increase of customer protection' etc.).	It is highly recommended to assess the possible outcomes that GRP may have in the conditions of the Ukrainian gas market. Such an assessment should adequately estimate the maximum benefits the GRP may bring: the expected rise in liquidity, the impact on domestic price discovery, the positive effects for the segments of the market (spot, long-term etc.) based on clear projected indicators (churn rates, HH index, price index in comparison with EU hubs etc... Besides that, certain risks that GRP may bring and options for their mitigations are to be outlined as well. Such an assessment should be done within a comprehensive market study and collecting feedback from the market participants.
Are there any available studies of market needs in terms of GRP and expectations from market participants?	There are no systemic studies of the market attitude towards GRP, although there are some opinions from market players.	It is recommended to conduct a survey of market expectations regarding GRP in the way, which is the most convenient for market participants and least costly for the state budget. This may include clarifying the positions of the market participants, including the alternative suppliers and potential newcomers to the Ukrainian market. The main issue to be considered in this survey is to figure out the amount of gas the market would be able to absorb when GRP is in place. This information will be necessary for determining the exact volumes to be offered and (possibly) to divide GRP into several stages.
Are there any trading venues (platforms) where GRP may take place?	There is an actively developing UEEX exchange, which is, however, still not fully compliant with all the necessary standards and	GRP could be more effectively undertaken when a proper venue for gas trade functions on the market. Presently the UEEX exchange is considered as the most liquid platform on the market. Nevertheless, there are numerous shortcomings in UEEX and other platforms to

⁹⁵ [HTTP://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=69642](http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?PF3511=69642)

[HTTPS://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=70473](https://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?PF3511=70473)

[HTTPS://ENERGY-COMMUNITY.ORG/DAM/JCR:EBD6670A-C231-4FD5-BDD6-762BF4F5880B/UKRAINIAN_GAS_MARKET_POSITION_PAPER.PDF](https://energy-community.org/dam/jcr:EBD6670A-C231-4FD5-BDD6-762BF4F5880B/UKRAINIAN_GAS_MARKET_POSITION_PAPER.PDF)

[HTTPS://WWW.NAFTOGAZ.COM/WWW/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&](https://www.naftogaz.com/www/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&)

Q&A REGULATORY/LEGISLATIVE CHECKLIST

QUESTION	ANSWER	COMMENTS/IMPLICATIONS
	non-licensed. Possibly, some other competitive trading venues will develop in the future.	be addressed: introduction of the fully-fledged clearing, developing a spot market segment, increasing the transparency of trading process etc. It is expected that many of these shortcomings are to be addressed in the process of preparation to licensing of UEEX and compliance with the requirements set by new Ukrainian legislation, including the Law 738-IX. The experience of GRPs from other countries demonstrate that it can be more efficiently implemented when all the conditions are present with the trading venues and GRP may have a positive impact all the segments of trade.
Are there any standardized products under which gas for GRP can be offered?	Currently, there is a lack of well-developed standardized products (besides several forward products offered on UEEX), especially designed considering the needs of GRP	At present trade on UEEX is mostly organized on the basis of month-front contracts (and a few other options). However, there is still a lack of diverse standardized products to be widely utilized on the market. The development of such standardized products shall be based on general EFET's recommendations and take into account the market study conducted before GRP to identify what options and conditions are mostly relevant and anticipated by the market for effective release of gas.
Do the current proposals for GRP contain any provisions that may limit the participation in GRPs?	Some of the current proposals for GRP focus on this issue suggesting quite a radical prohibition of participation of the incumbent's (namely Naftogaz) affiliates (in draft laws 3958 and 4400) or either set no explicit prohibitions (e.g., EnCS proposal). ⁹⁶	The issue of limiting incumbent's possibilities to acquire additional volumes from GRP is extremely tricky. Certain limitations for the incumbents exist in some of the examples considered (e.g., Romania); however, they were criticized by EFET and some other stakeholders, as such limitations may negatively affect the development of trade. Therefore, it is recommended not to create any ex-ante limitations for the market participants and some limited interventions shall be possible only in case of the objective need.

⁹⁶ [HTTP://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=69642](http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?PF3511=69642)

[HTTPS://W1.C1.RADA.GOV.UA/PLS/ZWEB2/WEBPROC4_1?PF3511=70473](https://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?PF3511=70473)

[HTTPS://ENERGY-COMMUNITY.ORG/DAM/JCR:EBD6670A-C231-4FD5-BDD6-762BF4F5880B/UKRAINIAN_GAS_MARKET_POSITION_PAPER.PDF](https://energy-community.org/dam/jcr:EBD6670A-C231-4FD5-BDD6-762BF4F5880B/UKRAINIAN_GAS_MARKET_POSITION_PAPER.PDF)

[HTTPS://WWW.NAFTOGAZ.COM/WWW/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&](https://www.naftogaz.com/www/3/NAKWEB.NSF/0/24B0F80F4B00B742C225864E004B9100?OPENDOCUMENT&YEAR=2020&MONTH=12&NT=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&)

Q&A REGULATORY/LEGISLATIVE CHECKLIST

QUESTION	ANSWER	COMMENTS/IMPLICATIONS
Are the risks of market manipulation/abuse during the GRP effectively mitigated?	Not effectively mitigated, the implementation of REMIT provisions is still ongoing in Ukraine and amendments to the primary and secondary law, as well as adjusting the system of market oversight is still needed.	The issue of lack of transparency and a high risk of market manipulation is another problem that may undermine the effectiveness of GRP. Thus, the implementation of REMIT is also extremely important for the proper introduction of GRP in Ukraine. This will also be likely to have a cross-cutting effect, for instance, compliance with REMIT may positively influence the preparedness of trading platforms.
Is there a clear mechanism for GRP already in place?	The available proposals provide several options for organizing the trading process within GRP at different levels of clarification. However, there is still need for an optimal approach to organizing the GRP trade, where many issues to be addressed at the 'lower' level, i.e., general trading rules of exchanges.	Several draft laws (3958; 4400) that suggest launching GRP provide with a very detailed specification of trading process (size of lots, starting price calculation, access of participants etc.). Having analyzed these draft laws, ESP concluded that such an approach does not seem to be effective and practically feasible and may bring the overregulation of the process. On the other hand, it is still important to avoid difficulties in realization of GRP by choosing an incorrect mode for its organization (e.g., lots are too big and restrain the access of smaller participants or too small to sell out all the intended amounts; the price is set on inadequate level etc.). Considering, the analysis of foreign experience of GRPs (where several approaches exist), it seems that it is important to establish clear basic principles at the level of legislation/regulation, leaving the specificities of trading process to the lower level (of trading rules on exchange etc.). Moreover, some of the details of organization of trade, frequency of auctions and specifics of standardized products are to be also provided in the regulatory documents, i.e., market rules. The possible shortcoming of the trading process shall then be mitigated/corrected by regulation and market oversight.

ANNEX I. EFET RECOMMENDATIONS AND GAS RELEASE PROGRAMS IN EUROPE

EFET RECOMMENDATIONS ⁹⁷	GAS RELEASE PROGRAMS						
	BULGARIA	ROMANIA	POLAND	HUNGARY (2006 – 2014)	GREAT BRITAIN (1988 – 1996)	GERMANY (2003 – 2006)	SPAIN (2001 – 2003)
Volumes released need to be significant compared with incumbent's portfolio	GRP begins with a smaller amount that to be increased by 2024: from 2 220 GWh to 11 099 GWh	40 % of the overall yearly volume	55 % of the annual portfolio	1 bcm (approximately 10 – 15 % of yearly consumption in respective years)	Around 500 million therms (approximately 14.6 TWh/1.49 bcm) – approximately 2,3 % of the market	Around 4 % of the market	Around 9 % of the market
Lots need to have a proper size to enable participation of smaller companies	No requirements for lots size; however, there are caps on max. quantity of gas to be allocated to the participants of auctions.	N/A	N/A (Initially, the GRP concept included several provisions on the max. size of lots; however, presently legislation do not contain similar specifications).	Certain classification of lots was provided.	N/A	The amount of gas for auction was divided in equal lots (approx. 1 TWh)	N/A
Flexibility mechanism in purchase (i.e. swing options) can be provided for buyers	Not specified	Not specified	N/A	Not provided	N/A	Existed: obligatory 80 % for annual purchases and 60 % for daily.	N/A
Gas release program to be linked to the overall portfolio, not a particular contract/field	No linkage to particular gas contract of the incumbent company	No linkage to any particular gas field (applied generally to all gas producers meeting certain parameters)	No linkage to specific contract	Concerned certain long-term gas supply contracts of MOL company	N/A	Concerned Rurhgas long-term import contracts	Concerned import contracts of Algerian gas

⁹⁷ BASED ON THE GENERAL RECOMMENDATIONS: [HTTPS://EFET.ORG/FILES/DOCUMENTS/INTERNAL%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%20%20\(1\).PDF](https://efet.org/files/documents/internal%20ENERGY%20MARKET/23%20JUNE%202003%20GAS%20RELEASE%20-%20FINAL%20VERSION%20%20(1).PDF) AND SOME PARTICULAR RECOMMENDATION ON CERTAIN GRPS.

EFET RECOMMENDATIONS ⁹⁷	GAS RELEASE PROGRAMS						
	BULGARIA	ROMANIA	POLAND	HUNGARY (2006 – 2014)	GREAT BRITAIN (1988 – 1996)	GERMANY (2003 – 2006)	SPAIN (2001 – 2003)
Price is to be based on WACOG/the wholesale market price or the average netback from the incumbents' eligible customers; better to avoid price floors	The starting price is to be determined by seller with regard to WACOG and some other variable.	Max. price to be established by the Regulator on the basis of the average Central European Gas Hub AG prices and prices on domestic market	Not specified	Was based on calculation of WACOG minus 5 %	Was based on WACOG + additional fee	Based on the average border price. Later also linked to Rotterdam traded gas oil and fuel oil products	Cost of supply + additional fees.
Limit the impact of incumbent's affiliates	Provisions on such restrictions are absent.	Certain restrictions on gas producing companies' affiliates to participate in the auctions. ⁹⁸	Affiliates are allowed to participate. This is also determined by complexity of situation in Poland, where a high number of bilateral long-term supply agreements deteriorated the demand on exchange. Thus, PGNiG established its retail company PGNiG Obrót Detaliczny to procure gas for end users on the exchange.	Affiliates' participation was restricted.	N/A	Affiliates' participation was restricted.	Affiliates' participation was restricted.

⁹⁸ THIS WAS, HOWEVER, CRITICIZED BY THE EFET IN THE CASE OF ROMANIA AND THESE RESTRICTIONS WERE CONSIDERED TO BE POTENTIALLY HARMFUL AT THE EARLY STAGE. MORE DETAILS:
[HTTPS://EFET.ORG/FILES/DOCUMENTS/GAS%20MARKET/GAS%20HUB%20DEVELOPMENT/EFET%20COMMENTS%20TO%20THE%20ROMANIAN%20GAS%20RELEASE%20PROGRAMME_14042020.PDF](https://efet.org/files/documents/gas%20market/gas%20hub%20development/efet%20comments%20to%20the%20romanian%20gas%20release%20programme_14042020.pdf)

EFET RECOMMENDATIONS ⁹⁷	GAS RELEASE PROGRAMS						
	BULGARIA	ROMANIA	POLAND	HUNGARY (2006 – 2014)	GREAT BRITAIN (1988 – 1996)	GERMANY (2003 – 2006)	SPAIN (2001 – 2003)
The quantities of gas not sold in a specific product auction should cascade down to auctions for products of shorter durations	Gas release program provides that unpurchased volume of gas that was auctioned as yearly products is to be sold as monthly products after the end of December 2019.	Gas release program contains certain volume quotas for each type of standardized products; however, does not provide with options for transferring the unpurchased volumes to different type of standardized products.	Not specified.	N/A	N/A	Unpurchased volumes in 2003 were transferred to next years' auctions.	N/A