The Ungheni-Chișinău Gas Pipeline: Outlook for Before and After 2020

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Acronyms

**ANRE** – Energy regulator

**CESEC** – Central and South-Eastern European Gas Connectivity

**EIB** – European Investment Bank

**EBRD** - European Bank for Reconstruction and Development

**BRUA** – Bulgaria-Romania-Hungary-Austria gas pipeline

**IMF** – International Monetary Fund

**MGRES** – Transnistrian power plant at Cuciurgan

**ECT** – Energy Community Treaty

**EU** – European Union
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Executive summary

The gas interconnection with Romania is a top priority for the energy security of Moldova. The finalization of the Iași-Ungheni pipeline in 2014 confirmed that this objective is not only desirable but achievable. The completion of the paperwork for the construction of the Ungheni-Chișinău pipeline on May 2, 20191 launched the actual construction. Proper management of the investment, technical (public procurement) and even (geo) political aspects are critical to finalize the gas connection from Romania to Chișinău.

Politically, the Moldovan authorities must prioritize the construction of the pipeline to Chișinău, where the demand for energy is located. One must put aside the negative political attitudes towards Romania and the European Union (EU), and political decision-makers and institutions must focus on facilitating and accelerating the connection to the Western gas market. The volatility of the regional context does not allow for any stop or delay on political grounds and requires swiftness in finding solutions to technical barriers, within the national legal framework. At the investment level, it is necessary to secure the construction operations of the Romanian company Transgaz SA, both in Romania and in Moldova, against the negative impact of the budgetary and fiscal policies of the Romanian authorities, which may affect the budgets allocated for construction. At the same time, priority is given to co-opting the European resources available to facilitate construction operations. Under no circumstances should the Romanian company receive exclusive treatment contrary to Moldovan legislation in the field of public procurement, environmental protection, etc. In technical matters, starting and finishing the construction requires compatibility between the European (European) construction standards used by the company and the (still) obsolete technical standards in Moldova. Also, there is a risk of a shortage of construction capacities, both for materials (pipelines) and labor force (qualified personnel - welders, site managers, etc.). As a horizontal issue for the whole interconnection project, it is essential to ensure a high level of transparency of the procurement process for the private land along the Ungheni-Chișinău pipeline route and for the actual construction of the infrastructure. On one hand, it is necessary to prevent arbitrary and disputable decisions in the land acquisition process, which could cause opposition to the construction of the pipeline. On the other hand, the up-to-date monitoring of the construction steps will ensure the identification of bottlenecks and their removal as swiftly as possible, in line with existing regulatory requirements.

It is essential that the Moldovan gas sector becomes fully functional, transparent and allows for fair competition, so that, after the infrastructure is built, gas flows through the pipelines. Before the project is finalized, one needs to develop the necessary regulations for real competition in the gas sector and the full implementation of the Third Energy Package (including the „ unbundling” of suppliers from networks). The construction of the gas pipeline construction does not mean that Gazprom’s monopoly is replaced with a Romanian monopoly, but free competition between Gazprom and suppliers from Romania and the European Union. Increased confidence in the independence and competence of the ANRE regulator is also critical. Also, we need a good negotiation with Gazprom for the next two years – within the given constraints – to avoid market foreclosure and exclusion of Romanian / European suppliers from the market once the pipeline is completed. Moldova also needs to reach an agreement with Ukraine on emergency gas supply if Russian gas is no longer available before the interconnectors are completed. This is a risk whether

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1 Ministry of Economy and Infrastructure, Transgaz has signed all contracts for the Ungheni-Chișinău pipeline, April 26, 2019, https://mei.gov.md/ro/content/compania-transgaz-semnat-toate-contractele-necesare-realizarii-conductei-ungheni-chisinau
Gazprom completely bypasses the transit via Ukraine in a few years or decides to discontinue or cut the supply of gas to Moldova for any other reason. To ensure both the entry of Romanian and Ukrainian suppliers in the Moldovan gas market and the use of gas infrastructure in Ukraine (for example, the underground storage), it is essential that the entire region (Moldova, Ukraine and Romania) fully implement EU's energy market rules.

The gas connection with Romania is part of a broader program to connect Moldova with the Romanian energy system ("Energy Road Maps"), which also includes the electricity interconnection on the Isaccea-Vulcăneşti-Chişinău route. Effective access to the Romanian gas market would increase Moldova's energy security, because it diversifies gas routes, sources and suppliers, thereby reducing geopolitical pressures. Russia's intention to bypass the gas transit to the EU via Ukraine through the construction of Nord Stream 2 and Turkish Stream increases the urgency to connect Moldova with the Romanian energy networks and supplies. At the same time, it is necessary to establish a strategic energy dialogue between Moldova and Ukraine at the level of regulators, line ministries and system operators - ideally, with the support of the European Commission. Such a Moldovan-Ukrainian strategic dialogue would include the coordination of cross-border energy projects, emergency supplies in case of a crisis and would help mitigate the consequences resulting from decisions of third parties (Russia). The European Commission, as a neutral and credible mediator, could facilitate the negotiations between Ukraine and Moldova on this issue, but also on others where the two countries have opposing views and where an agreement could be facilitated by the implementation of European directives - for example, the hydro-complex on the Dniester, the speed with which Ukraine will connect to the European ENTSO-E system on electricity, etc. Such a triilogue would also support the energy sector's transparency in both countries.

Moldova’s choice to abandon European financial assistance changed the status quo of the project. The initial funding from the EBRD and the EIB, which contributed 41m euros each to the construction of the Ungheni-Chișinău section, topped a 10m euros grant from the EU, conditioned on reforms in the energy sector. Thus, the decision of the Moldovan authorities to privatize Vestmoldtransgaz is based on two major considerations. Firstly, by transferring the responsibility for the pipeline construction to Romania, the Moldovan Government avoided a new mechanism of "energy conditionality" comprising sector reforms whose implementation entailed EBRD and EIB monitoring. The official argument of the authorities is that, on the one hand, privatization is an opportunity to reduce Government debt, and on the other hand it can channel foreign investments to other needs such as increasing energy efficiency. Secondly, by privatizing Vestmoldtransgaz, the Moldovan side actually "concessioned" the responsibility for an infrastructure project.

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3 The loan for the electricity interconnection amounting to 80 mil. EUR was signed between the Moldova Government and EIB and EBRD in December 2017, https://radiochisinau.md/ministerul-economiei-a-semnat-acordurile-de-imprumut-cu-berd-si-bei-privind-interconectarea-retelelor-electrice-cu-romania----61000.html?brefresh=1513770759
5 EBRD and EIB provide 82 mil euros for the development of the Ungheni-Chișinău pipeline, December 19, 2016, http://tvrmoldova.md/economic/berd-si-bei-ofera-82-de-milioane-de-euro-pentru-derivatul-gazoductului-ungheni-chisinau/
6 In July 2017, the Parliament voted “in the first reading” the loan with EIB and EBRD. On February 7, 2018, the Agency for Public Property announces the privatization of Vestmoldtransgaz with Transgaz.
7 The Agency for Public Property, February 7, 2018, https://app.gov.md/ro/content/comunicat-1
8 Why does the Government privatize the company that manages the Iași-Ungheni Pipeline, October 30, 2017, https://www.mold-street.com/?go=news&n=6632
to an external “private” investor - Transgaz\textsuperscript{9}. The transfer of such a strategic project to a foreign investor would have become an indisputable advantage if the company were completely independent from political interference. In fact, the Romanian investor - Transgaz - is a majority state-owned company, subject to the political decisions of the Romanian Government, who provided political and financial support to the ruling party in the Moldovan government in 2016-2018. In particular, while the EU tightened its conditionality towards the Moldovan government, Romanian officials freely lent 150 million euros between August 2016 and September 2017\textsuperscript{10}. On the other hand, it can be argued that the Ungheni-Chișinău pipeline would not belong either to Moldovagaz or to Chișinău authorities; this limits the risk that, for example, Gazprom would try to gain control of this pipeline as repayment for the historical debt accumulated through unpaid gas bills. Another advantage would be to increase the coherence of the interconnection project, as Transgaz also needs to carry out works in Romania (the Onesti - Gherăiești - Lețcani gas pipeline and compressing stations in Onesti and Gherăiești) before the pipeline can be fully operational.

This report analyzes the status of the gas interconnection between Romania and Moldova, which requires extensions both in Moldova and in Romania. The document takes stock of the progress to date, but also the risks concerning the construction of the gas pipeline both in Romania and Moldova. In the first chapter, the report focuses on the incipient phases of the interconnection and examines the geopolitical and legal circumstances in which the stakeholders promote the Moldovan-Romanian interconnection on gas. The second chapter reviews the privatization of the infrastructure (Vestmoldtransgaz) and highlights the main developments in this energy project. The third chapter reflects on the situation in the Romanian natural gas sector, the development of which in terms of internal production and export capacity has an essential role for the interconnector to become fully functional. Finally, the report proposes a set of actions needed to ensure the construction of a well-functioning gas pipeline in Moldova’s energy market, all the way to Chișinău, but also competitive in terms of the final consumer price.

1. The initial idea behind the Ungheni- Chișinău gas pipeline: Diversification to reduce energy dependence?

The best solution to guarantee energy security is to reduce the energy dependence on a single source and to diversify routes. This principle was behind the gas interconnection project with Romania. Apart from the structural weaknesses of the Moldovan energy system, the decision to connect to the Romanian system also has political and geopolitical reasons.


\textsuperscript{10} The last installment of the 150 de mil. EUR loan provided by Romania reached the Ministry of Finance in Chișinău, September 26, 2017, https://www.moldova.org/ultima-transa-din-creditul-de-150-de-milioane-ofert-de-romania-ajuns-la-ministerul-finantelor-de-la-chisinau/
1.1 The dependence on Russia - a structural problem

First of all, with no readily accessible energy resources, Moldova depends on external energy supplies. The most severe energy dependence is in the natural gas sector, where almost 100% of the supplies are imported from Russia. In addition to the production of heat and energy for domestic consumption, natural gas serves as raw material for the production of electricity at the Dniestrovsk Moldovan Thermoelectric Power Plant (MGRES) in Cuciurgan, a process controlled by Transnistria.

There are several risks related to the dependence on Russia. First of all, the Russian Gazprom concern is involved in the entire chain of the Moldovan gas system. Gazprom controls more than 50% of the state-owned company that supplies Russian in Moldova - MoldovaGaz, which imports over 99% of the total gas consumed in the country. The same company is also the founder of the Moldovatransgaz transport operator and controls 70% of the country’s gas distribution networks (12 subsidiaries), serving the consumers in Chișinău, Bălți and regions. The Russian monopoly in the gas market remains untouched for the time being despite the timid attempts of the Moldovan authorities to apply the principles of the Second Energy Package ("functional unbundling") and the Third Energy Package ("effective unbundling"). Thus, theoretically, system operators and transport operators in the sector must be legally and functionally independent of the suppliers’ interests in managing the gas infrastructure. Otherwise, existing suppliers (in our case, Gazprom) could block new competitors from entering the market, a major risk if the interconnection with Romania is finalized and Romanian suppliers would like to enter the Moldovan market. Although the process of "unbundling" is already under way, its finalization is extremely difficult. It depends on MoldovaGaz’s willingness to comply with the legal requirements and the ability of ANRE to fulfill its certification tasks fully, without delay, and to monitor the compliance of operators in the sector with the unbundling principles\textsuperscript{11}. Even if the monopoly in the gas sector were eliminated before December 31, 2019, according to the decision of the Energy Community in 2012\textsuperscript{12}, the unbundling would take place only on the Right Bank of the Dniester. In this way, the operator of the Transnistrian region (Tiraspoltransgaz) will continue to operate based on parallel legislation, not compliant with the Moldovan legal framework, which transposes the EU’s energy acquis\textsuperscript{13}.

The particular clauses of the supply contract with Gazprom lead to a second set of disadvantages. Signed 13 years ago, the contract with Gazprom reflects Moldova’s weak position in front of Russia in 2006, when the Russian side decided to increase the prices for natural gas delivered to ex-Soviet states, particularly to those that drifted away from Russia towards the EU. At the time, the price for natural gas supplied to Moldova doubled - from USD 80 to USD 160 per 1000 m\textsuperscript{3}, increasing by about 50% the end-user price\textsuperscript{14}. Since 2006, the price of gas supplied by Russia ranged between 160 USD to nearly 400 USD per 1000 cubic meters (see Table 1), without the Moldovan side taking any steps to negotiate a new, more advantageous contract.

\textsuperscript{11} Article 7 concerning the role of ANRE from Law 108 of 27.05.2016 on gas, http://lex.justice.md/md/%20365664/
\textsuperscript{12} Energy Community, the State of Gas Market Integration in the Energy Community, Special Report for the CESEC High Level Group Meeting, 29 iunie 2018
\textsuperscript{14} Russia’s offensive: „the wine war” and gas at double the price, August 16, 2016, https://moldova.europalibera.org/a/27923204.html
The renegotiation of contracts with Russia should carefully consider whether international oil quotas are a convenient reference to calculate the gas price. Because of their (geo)political and artificial structure, oil prices are a risky reference for the import price for natural gas in countries with absolute energy dependence. For these reasons, access to the Romanian gas market may reduce the influence of uncontrollable exogenous factors, such as oil price fluctuations caused by political arrangements or political-military conflicts involving the major oil producers (Venezuela, Iran). The emergence of several suppliers increases competition, leading to more predictability for the end-user price for natural gas for Moldova. Also, the existence of an alternative to gas purchases will strengthen the negotiating power of the Moldovan authorities with Gazprom.

Moldova’s massive exposure to natural gas debt caused by gas consumption in the Transnistrian region is the third essential dimension for the development of a robust natural gas market. The ambiguities of the contractual provisions between Moldovagaz and Gazprom allow the Tiraspol administration to neglect any financial responsibility for its gas consumption. The debt accumulated to date is up to about 7 billion USD, and the discussion about the management of this debt is permanently postponed by the Russian side. The separatist authorities say that Russia is paying for gas transit services in Transnistria in kind (with gas). Approximately 135 thousand people (about 30% of the region’s population) would benefit free gas amounting to 140 m3 during the cold period of the year (6 months) and 27 m3 in the other 6 months. Free gas subsidies cover categories of retired people, people with disabilities, ex-participants in military actions on the Dniester, etc. At the same time, from the sale of Russian gas to the remaining households and industry, the separatist authorities collect revenues to the region’s imbalanced budget, accounting for some 1.3 billion USD in the years 2007-2016. Using access to natural gas as a cheap source of electricity generation at the MGRES,

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16 According to the contract with Gazprom from 2006, the price formula for gas delivered to Moldova is based on three components: 1) average price for gas exported to the EU; 2) average price for heavy oil in the EU market; and, 3) average oil price.
18 Starting with 2016, Russia colludes with OPEC in artificially limiting oil production, to create a shortage in the market and drive the prices upwards. Oil prices dropped by half from 115 USD for the oil barrel in 2014 to 63 USD in December 2018.
the separatist authorities have set in motion a cryptocurrency production scheme that increases energy consumption and provides additional revenue. The failure to solve the gas debt issue generates additional pressures on the entire gas market, even if the debt belongs to MoldovaGaz, whose major shareholder is Gazprom. The vulnerability of the political decision-makers to the Russian factor can influence the negotiations for the settlement of the Transnistrian conflict. As a result, over 6 billion USD due by the Tiraspol administration for unpaid Russian gas could be taken over by the Moldovan constitutional authorities as a prerequisite for reintegration of the country.

The fourth dimension of risk concerning Russia is the use of gas pipelines to Europe as a geopolitical weapon. Thus, the construction of gas pipelines to bypass (in fact, to isolate) Ukraine from the European gas market, in the North through the Baltic Sea (“Nord Stream 2”) and in the South under the Black Sea (“Turkish Stream”) puts Moldovan consumers at a disadvantage. It is very likely that Moldova will end up in an "energy crisis" when the Russian supplier interrupts the supply of natural gas through Ukraine. Both household and industrial gas and electricity consumption will be compromised, as up to 80% of the electricity used in Moldova is produced in the Transnistrian region by burning Russian natural gas. The regional uncertainty concerning the gas pipelines further increases the strategic value of the Ungheni-Chișinău pipeline and of the entire package of interconnections with Romania. The cooperation with the Ukrainians to ensure gas interoperability of the pipelines is equally essential (requiring the participation of Moldovatransgaz and the implementation of the technical code on the interoperability of transport networks) as it allows diversification of the Moldovan energy security on the West-East axis as a solution to Gazprom’s pressure.

1.2 Gas interconnections: from EU principle to Eastern European principle

The policy to diversify energy sources and routes in Eastern Europe is strongly impelled by the qualitative transformation of the energy security discourse at European level. In the first phase, within the limits of the Energy Security Strategy launched in 2014, the EU prioritized the reduction of its vulnerabilities to external energy shocks. The diversification of supplier countries and delivery routes is a long-term objective along with the integration of the internal energy market. Consequently, the construction of interconnections between EU countries has been accelerated to ensure uninterrupted gas supply. For this reason, the EU allocates financial resources for cross-border gas interconnection projects using the Connecting Europe Facility (5.3 billion EUR for 2014-2020). Currently, the indicator used by the EU to measure the sustainability of gas infrastructure has improved especially in Central Europe (the Czech Republic, Hungary and Slovakia), which has increased its technical capacity to withstand disruptions caused by potential gas supply cuts.

Over 2009-2016, 17 Member States have greatly improved their infrastructure capacities, the other 11 EU countries

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24 Energy Community, https://www.energy-community.org/implementation/Moldova/GAS.html
have either retained the previous level of refurbishment or have not made any progress. Many interconnection infrastructure construction projects are in progress (2017 - 77 projects). About 100 new interconnection projects were proposed to be funded in 2019. A number of projects aim at interconnecting natural gas with Romania's participation; future domestic gas production and export capacities depend on these.

**Figure 1. Map of on-going Projects of Common Interest**

Source: European Commission. The map highlights the following gas infrastructure: liquefied gas terminals, storage facilities, reverse flows, pressure compressors, pipelines.

The efforts to unify energy systems at European level aim to create an "Energy Union", with the result that, for example, electricity is projected to achieve intra-European interconnection targets of 10% by 2020 and 15% by 2030, respectively. To consolidate the gas market during the Romanian Presidency, the EU managed to reach a consensus on the revision of the Gas Directive, which foresees the extension of the applicability of the principle of unbundling to all pipelines supplying gas from third party countries to the EU. The Nord Stream 2 project is subject to the new


[32] 1) TRA-N-655 Eastring - Romania; 2) TRA-F-286 Romanian-Hungarian reverse flow Hungarian section 1st stage; 3) TRA-N-377 Romanian-Hungarian reverse flow Hungarian section 2nd stage; 4) TRA-F-358 Development on the Romanian territory of the NTS (BG—RO—HU—AT)-Phase I; 5) TRA-N-139 Interconnection of the NTS with the DTS and reverse flow at Isaccea; 6) UGS-N-233 Depomures; 7) TRA-N-362 Development on the Romanian territory of the Southern Transmission Corridor; 8) TRA-N-964 New NTS developments for taking over gas from the Black Sea shore; 9) TRA-N-1322 Development on the Romanian territory of the NTS (BG—RO—HU—AT)-Phase II; 10) UGS-N-371 Sarmasel underground gas storage in Romania; 11) LNG-N-376 Azerbaijan, Georgia, Romania Interconnector - AGRI; 12) TRA-N-959 Further enlargement of the BG—RO—HU—AT transmission corridor (BRUA) phase 3

[33] European Commission, Energy Union Package, February 28, 2015, [https://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF)


conditions for the EU gas market, adopted on 15 April 2019. As a result, Gazprom is forced to create new export companies to comply with the European unbundling rules before it starts to deliver gas via Nord Stream 2; of course, Gazprom is now trying to obtain derogations from the new rule. Some Member States are trying to block the project under other regulations, such as environmental rules. This may postpone the commissioning of the gas pipeline, criticized vehemently by Ukraine, the US and several EU countries (Poland, Lithuania, Estonia and Latvia, etc.). European energy practices are disseminated through the export of legislation and the close coordination of measures with the Energy Community, which includes Moldova (since 2010) and other Eastern Partnership countries and the Western Balkans. Through the Energy Community, the EU has suggested developing action plans to prepare for energy security, including for East European countries. Separately, the Community Secretariat is in the process of implementing a natural gas roadmap to achieve the creation of an integrated pan-European gas market. Regional efforts to coagulate gas market capacities through the establishment of the CESEC in 2015 have intensified. The latest CESEC report shows that although Moldova adopted the Gas Law as early as May 2016 transposing the EU acquis on gas supply, there is no secondary legislation that would ensure safe and efficient gas deliveries (in particular an action plan for exceptional situations) 41. This situation was corrected relatively recently, with the adoption in 2019 of the Government Decision comprising the Regulation on exceptional situations in the natural gas market and the Action Plan for exceptional situations in the natural gas market.

Moreover, the principle of diversification in the European energy sector overlapped with the principle of connectivity within the Eastern Partnership. The expansion of energy infrastructure (natural gas, electricity) between Eastern European countries and between these and EU countries was promoted under the objective of strengthening intra-regional connections in the action plan for the Deliverables 2020 dedicated to the Eastern neighbors of the EU. The measures indicated in this operational document also included the acceleration of the Ungheni-Chișinău interconnection by providing the financial support described above. The grant was virtually not granted (EUR 9 million) following the privatization of Vestmoldtransgaz and the full takeover of the project by Transgaz.

1.3 Transposition of European legislation - a step towards liberalization, but also an increased security for the gas pipeline

The transposition of European legislation is a voluntary commitment of the Moldovan authorities which signed the Association Agreement (2014) and gained membership of the Energy Community (2010). Broadly speaking, the adoption of European energy standards clarifies market rules, reinforces the role of the regulator, creates a favorable

39 Energy Community, Energy Community Gas Action 2020
41 Raportul CESEC, The State of Gas Market Integration in the Energy Community, 29 Iunie 2018
42 http://lex.justice.md/md/380171/
context for the liberalization of energy supply services by facilitating competition and diversification. The transposition of primary legislation is partial, and at present the National Agency for Energy Regulation (ANRE) is working on the development of the secondary legal framework, in close consultation with the Energy Community Secretariat.

Specifically, the gas interconnection objective is found in the Energy Law\textsuperscript{44} and the Gas Law\textsuperscript{45}. The first law stipulates that the central body of public administration, namely the Ministry of Economy and Industry, should promote the expansion of interconnections and the integration of national energy sectors into regional markets (Article 5, p. g). At the same time, the same law indicates that ANRE is obliged to remove restrictions that limit or generally hinder trade flows, including on natural gas. Additionally, the Agency is expected to stimulate the development of interconnections to meet consumer needs and to help connect the country to energy flows within the Energy Community (Article 12, p. g). The law also allows the Government to view as strategic energy infrastructure for general economic or security interests, including in the field of natural gas (Article 30 (1), (2)). For their construction and maintenance, the Government may impose public service obligations and may make other payments if the revenue from their use does not cover costs. Thus, both public authorities and political institutions have a very favorable legal framework to emphasize the importance of the gas interconnector with Romania and prioritize it in relation to other public-private investment projects and to ensure the recovery of the investment. The second law, on natural gas, is more explicit and defines interconnection aspects in an almost exhaustive manner. Several aspects of the law stand out, such as: 1) Government competencies concerning the approvals for the construction of infrastructure projects; 2) ANRE’s role to monitor technical and commercial data on interconnections; 3) the definition of the transmission system operator’s responsibilities in the management of the network (and congestions) and in ensuring compatibility with the interconnector and, eventually, with the storage of natural gas (which does not exist yet).

The implementation of the Third Energy Package III in the gas sector is not uniform. Various elements of European legislation are only partially transposed. According to CESEC evaluations dating back to 2018\textsuperscript{46}, the effective transposition of the gas acquis does not exceed 50%. Closer to European standards are the legal provisions that offer consumers the right to change their gas supplier and regulate capacity allocations for the transmission networks (both at 50%). The discussions on the adoption of technical codes for the allocation of capacities in transport systems and the setting of a harmonized tariff for gas transportation are in progress but not finalized\textsuperscript{47}. No major progress has been reported in terms of security of supply because the secondary legislation (drafted by ANRE), which should lead to an action plan to guarantee gas supplies in emergency situations, is not yet in force (below 40% level of implementation). The liquidity of the gas market is close to zero, as there are no alternative sources for the gas imports. This gap can be offset by interconnection with Romania once it is finalized (around 40% implementation level). Also there is no clarity about the current status of the methodology for entry/exit tariffs, which ANRE should have prepared by end-2018, with the assistance of the Energy Community Secretariat\textsuperscript{48}, including the methodology adjustments related to the fact that there will be more than one operator. This delay restricts the freedom to purchase natural gas outside the existing contractual framework. It is largely caused by the absolute monopoly of the Russian supplier, which will be challenged

\textsuperscript{44} Energy Law 174 of 21.09.2017, \url{http://lex.justice.md/md/371969/}
\textsuperscript{45} Gas Law 108 of 27.05.2016, \url{http://lex.justice.md/md/%20365664/}
\textsuperscript{46} CESEC Report, The State of Gas Market Integration in the Energy Community, June 29, 2018
\textsuperscript{47} ANRE, Moldova closer to the implementation of the gas network codes, April 2, 2019, \url{http://anre.md/ro/content/republica-moldova-mai-aproape-de-implementarea-codurilor-re%C8%9BBeelor-de-gaze-naturale}
\textsuperscript{48} CESEC Report, The State of Gas Market Integration in the Energy Community, June 29, 2018
only after the gas starts flowing from Romania.

The Energy Community confirms that, even though the horizontal gas legislation is in force since 2016, many secondary rules are needed to make the market operational. Thus, the Report on the state of implementation of commitments within the Energy Community for 2018 estimates a 22% achievement in the gas sector. Like the CESEC, the Energy Community secretariat reports problems of legal compliance with the European model concerning the effective unbundling of suppliers from networks, the entry/exit tariffs, the transposition of technical codes, the liberalization of the wholesale market, etc. The launch of the Guide for the Legal and Functional Gas Unbundling is a positive development under the pressure of the Russian monopoly. But this step is incipient and the Guide is a recommendation, with no legally binding provisions. This is why none of the gas operators has yet been certified by ANRE after the finalization of the unbundling procedure. However, both the unbundling principle and other technical issues should be settled as soon as possible and before the interconnection with Romania is finalized, in order to increase the confidence of the potential Romanian suppliers and to attract additional investments in the gas sector.

2. Privatization of Vestmoldtransgaz and obstacles in the construction of the Ungheni-Chișinău pipeline

The existing Iasi-Ungheni gas pipeline was commissioned on August 27, 2014 and is operated by Vestmoldtransgaz. The interconnector has a length of 43.2 km, of which 10.5 km on Moldova’s territory. The annual transport capacity initially considered by this gas pipeline is 1.5 billion m³, which would cover the total gas consumption of Moldova of about 1 billion m³/year, if we exclude the Left Bank of the Dniester. It should be noted, however, that 1.5 billion m³/year correspond to an hourly flow rate of 175,000 m³/h, insufficient to cover the winter consumption peaks of the Right Bank of about 250,000 mc/h. Approximately 63-64% of total gas consumption in Moldova is recorded in Chișinău, where are located the main CHPs, CET-1 and CET-2. For this reason, the extension of the existing Iasi-Ungheni gas pipeline to Chișinău is critical to strengthen Moldova’s energy security.

The construction of the Iasi-Ungheni gas pipeline was just the first stage for the full interconnection of Moldova to the gas infrastructure of the European Union. In order to be able to fully cover gas consumption, two additional components are needed:

- **The construction of the Ungheni-Chișinău gas pipeline**, which will have a length of 120 km and an estimated cost of 93 million EUR;
- **The construction of the Onesti-Gherăiești-Lețcani gas pipeline** with 2 compressing stations on the territory of Romania. The gas pipeline on the territory of Romania will have a length of 165 km and the investments

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49 https://www.energy-community.org/implementation/IR2018.html
50 Energy Community, https://www.energy-community.org/implementation/Moldova/GAS.html
51 the Guide for the Legal and Functional Gas Unbundling, http://anre.md/ro/content/ghiduri
52 Government Decision 501 of July 1, 2014 regarding the setup of SOE “Vestmoldtransgaz”
are estimated at 174 million EUR\textsuperscript{53}.

Initially the construction of the Ungheni-Chișinău pipeline was to be carried out by the Moldovan Government through the SOE "Vestmoldtransgaz", and there were no announcements of any intentions to privatize the state operator. Neither the interconnection roadmap nor the agreements signed with the financing partners considered the option to privatize the company operating the Iasi-Ungheni gas pipeline. Moreover, in the past 5 years, Moldovan political decision-makers made statements about the importance of the interconnection, but none of the announced deadlines for the completion of the interconnection was respected.

In June 2014, before the finalization of the Iasi-Ungheni gas pipeline, Deputy Economy Minister Tudor Copaci announced the contracting of the feasibility study for the extension of the gas pipeline to Chișinău\textsuperscript{54}. Also in June 2014, an amendment to the financing agreement between Moldova and the European Commission was signed, providing a grant of 10 million EUR for the construction of the Ungheni-Chișinău gas pipeline. At a press conference in September 2014, Andrian Candu, then-minister of economy, announced that the feasibility study will be completed in February 2015, and that the Ungheni-Chișinău gas pipeline would be completed by the end of 2015\textsuperscript{55}. Subsequently, in November 2014, Prime Minister Iurie Leancă announced a new deadline for the completion of the works - August 2016\textsuperscript{56}.

In May 2015, the Prime Ministers of Romania and Moldova sign a Memorandum of Understanding between the Government of Romania and the Government of Moldova to finalize the needed works for the interconnection of the natural gas and electricity networks in Romania and Moldova\textsuperscript{57}. The memorandum is important in that it stipulates in Article 3 (3) the commitment of the parties to ensure a 250,000 m3 / h (2.2 billion m3 / year) flow and a 45 bar pressure at the border, which would have been enough to cover 100% of the gas consumption on the Right Bank.

The roadmaps for the energy interconnection projects with EU (Romania) were approved by the Government Decision 409 of 16.06.2015. According to the document, the construction was planned for between 2016-2017 and the pipeline should have been commissioned by the end of 2017\textsuperscript{58}. That document does not mention the intention of the central authorities to privatize the existing interconnector. In December 2016 the Ministry of Economy signed the financing agreements with the EBRD and the EIB for the construction of the gas pipeline to Chișinău. The European banks were to provide together about 80 million EUR, in addition to the 10 million EUR grant from the European Commission. These funds were to be transferred to SOE "Vestmoldtransgaz", in charge with the construction and operation of the gas pipeline\textsuperscript{59}. Subsequently, Prime Minister Pavel Filip announced in March 2017 the decision of the European Commission to increase the grant amount from EUR 10 million to EUR 40 million for the interconnection project\textsuperscript{60}, which later proved to be a confusion with the 40 million EUR for the electricity interconnection. Also, the prime minister had announced a new deadline for the completion of the works - the end of 2018. More recently, in April 2019, Economy Minister Chiril

\textsuperscript{57} http://legislatie.just.ro/Public/DetaliiDocumentAfiis/171293
\textsuperscript{58} GD 409 of June 16, 2015, annex 2, p. 25
Gaburici mentioned that the gas pipeline must be operational by the end of this year\textsuperscript{61}.

### 2.1 Privatization of Vestmoldtransgaz and construction tenders

The option to privatize the state-owned company Vestmoldtransgaz was first circulated in public space by Deputy Economy Minister Vitalie Iurcu at Parliament’s sitting on July 21, 2017, during the Parliamentary ratification (in the first reading) of the financing agreements with the EBRD, the EIB and the EU on the construction of the Ungheni-Chișinău gas pipeline\textsuperscript{62}. The decision was somewhat surprising given that the financing agreements (not yet ratified) had been negotiated and signed, including for the announced 10 million EUR grant. Later the authorities motivated the decision as a means to avoid increasing the budget's debts, in line with the commitments made in the memorandum signed with the International Monetary Fund (IMF)\textsuperscript{63}. The president of the parliamentary commission for economy, budget and finance, Ștefan Creangă, declared prior to the privatization that the construction of the gas pipeline would be carried out by the end of 2018\textsuperscript{64}.

The privatization of the "Vestmoldtransgaz" (taken over by Transgaz) should take into account at least two matters: "Transgaz" was in charge with the technical design of the Chișinău-Ungheni pipeline and they would also carry out the construction of the gas infrastructure in Romania. The full functionality of the gas pipeline depends critically on works in Romania, no matter the pace of constructions in Moldova. Thus, on October 27, 2017, the Public Property Agency announced the tender for the privatization of several assets, including Vestmoldtransgaz for the amount of 180 million MDL\textsuperscript{65}. The conditions of the privatization contest included the participant's obligation to invest "at least" 93 million EUR over 2 years\textsuperscript{66}. On February 26, 2018, the Commission in charge with the privatization tenders nominated LLC "Eurotransgaz" as the winner of the contest for the amount of 180.2 million MDL and on March 28, 2018 the privatization contract was signed. According to the substantiation note of the Government Decision approving the privatization contract, a series of suspensive clauses\textsuperscript{67} were provided before the transfer of the ownership rights, namely:

- Adoption and entry into force of the amendment to the Law 105 of June 9, 2017 regarding the declaration of the construction of Ungheni-Chișinău gas pipeline as works of public utility and of national interest. This means: (i) commitment to allocate budgets for the compensations for land expropriations; (ii) Vestmoldtransgaz is exempted from following the negotiation procedure with the affected landowners; (iii) "Vestmoldtransgaz" obtains the rights on the expropriated land free of cost; (iv) "Vestmoldtransgaz" gets derogations from certain obligations to obtain the construction permit; and (v) necessary conditions for the commencement of the works are provided;
- ANRE's approval of the reorganization of "Vestmoldtransgaz" as a limited liability company, which retains the previously obtained gas transmission license;

\textsuperscript{63} Mold-street.com: „De ce Guvernul privatizează compania ce deţine gazoductul Iaşi-Ungheni”, 30 Octombrie 2017, https://www.mold-street.com/?go=news&n=6632
\textsuperscript{66} https://app.gov.md/sites/default/files/comunicat_informativ_ro.pdf
• Competition Council’s opinion regarding the transfer of the ownership, reorganization and increase of the share capital of “Vestmoldtransgaz”;
• The construction authorization for the construction of the gas pipeline;
• “Vestmoldtransgaz” has the right of use for all the land affected by the pipeline construction; the land is taken out from agriculture use (if the case) and the land is registered in the Real Estate Register with “Vestmoldtransgaz” as beneficiary.

The documents concerning the completion of the privatization process were signed on 6 September 2018. By signing the Certificate of Completion, the parties confirmed that the conditions for the privatization contract to enter into force were met. The 2-year term to finalize the investment starts as of this date. Between September 2018 and April 2019, the company conducted several auctions to select the contractors for the pipeline construction.

The first announcement for tenders was published in the Public Procurement Bulletin on September 28, 2018 and included 7 lots. Although the deadline for the submission of tenders was extended, the company received offers only for lot 5 “Execution of works at the regulation and measurement station” and lot 7 “Administrative complex Ghidighici”. For lots 1 to 4 which provide for the construction of gas pipelines and lot 6 which includes the construction of the gas distribution pipeline no offers were submitted. Until January 2019, two other tenders were organized, in which a winner was selected for only another lot. At the repeated tender in November 2018 the situation did not change and the procurement committee canceled the tender procedure for lack of offers. According to the information disseminated by Vestmoldtransgaz about the 3rd tender, the contract for the acquisition of the works for lot 7 was concluded on January 14, 2019, on the construction of the administrative complex Ghidighici. The contract for the construction of Lot 4 of the project was signed in March 2019 and the contracts for the 5 remaining lots were finally signed in April 2019. According to the tender documentation, deadline for the works is 12 months from the order to start. Most likely, the initial auctions were canceled due to the lack of interest of potential bidders given the initial terms (tight deadlines and delay penalties), the highest risk perceived by companies being the difficulty in finding workforce (especially welders, site managers etc.) and materials. Indeed, throughout the region (including Romania), this risk is high because of labor migration and other large construction works for pipelines in the region, which could affect the completion of construction in both Romania and Moldova.

2.2 End-2019: a critical deadline

The current gas supply contract signed with Gazprom expires in December 2019. Negotiations to sign a new contract are due to start a few months earlier. If the gas pipeline to Romania is not put into operation until the start of discussions with the Russian supplier, Moldova has no alternative sources to procure gas and will face significant

difficulties in negotiating with Gazprom. Although Moldova is in a difficult situation, the negotiation agenda for the new gas supply contract must necessarily **exclude the abusive clauses contained in the current contract**:

- Moldovagaz supplies gas both to the Right Bank and the separatist region jointly, while the latter does not pay for the gas consumed, which will lead to a further increase of the debts to "Gazprom";
- The abusive 50/50 split of revenues from gas transit between Moldova and the separatist authorities. By this clause, the public budget loses annually over 20% of the gas transit revenues in favor of Tiraspol. If these revenues were paid to the Right Bank, the end-user tariff for Moldovan consumers would have dropped by 2-6%, in our estimates;
- Disputes should no longer be settled at the Commercial Arbitration at the Moscow Chamber of Commerce and Industry, as in the current contract, but the new contract should refer disputes to the international arbitration in Stockholm, as stipulated in the gas delivery contract between Ukraine and Russia.

Critically, the future contract must **not** contain clauses that could prevent the market entry of suppliers from other countries (Romania, after the completion of the gas pipeline, but also Ukraine, for possible emergency supplies).

Regretfully, the government in Chișinău has knowingly delayed the interconnection process over the last four years and starts from extremely weak positions in the future discussions with Gazprom. Taking advantage of the monopolistic position regarding the gas supply in Moldova, as well as of the (more or less justified) weakness of the Moldovan institutions, Russia will continue to promote its strategic agenda in Moldova through Gazprom.

### 2.3 Outlook for beyond 2019

The diversification of Moldova’s gas supplies will meet three objectives: (i) stronger energy security and lower dependence on Russian gas; (ii) stronger negotiation positions with Gazprom, and (iii) creation of a competitive market that would help reduce the gas prices. From a technical and economic point of view, the optimal solution to meet these objectives is to finalize the reverse flow of the existing Trans-Balkan pipelines, which are now used to transit gas from Russia to Bulgaria, Greece and Turkey. The reverse flow requires much lower investment, its economics are better compared to the Iasi-Ungheni-Chișinău interconnector and has a lower impact on the transport tariff. However, for reasons that elude us, this solution is not discussed at the level of political decision-makers. The Intergovernmental Memorandum on reverse gas flows on Trans-Balkan pipelines was signed in 2016 without Moldova. It should also be noted that investments in other countries (Bulgaria, Romania), which only CESEC can coordinate, are needed for the use of these reverse flow pipelines. On the other hand, an ICIS investigation showed last year that, even in Romania, an EU member country who should fully implement the Third Energy Package, EU rules of third party access are not applied on the transit pipeline Isaccea-Negru Voda, even though it is owned by the Romanian company Transgaz. This means that Gazprom de facto controls the pipeline and does not allow other suppliers to access it although there is

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Gas transit revenues are distributed 50/50 between "Moldovatransgaz" and "Tiraspol-Transgaz", although 71% of the main gas pipelines are located on the territory of Moldova and only 29% - on the Left Bank of the Dniester.


available capacity. The reasons are mixed, both the lack of political will in Romania and Gazprom's pressures allow this situation to continue. It would be even more difficult for Ukraine and Moldova to access these pipelines enforcing EU rules.

An important aspect in enhancing gas security concerns the intentions of Russian authorities to stop gas transit on Ukrainian territory. Gazprom’s natural gas supply to Moldova is currently being delivered exclusively through Ukrainian main pipelines. Also, Gazprom transits through Ukraine about 40-50% of the volume of gas exported to the EU78. After the military conflict in eastern Ukraine and the annexation of Crimea, Russia started the construction of two main gas pipelines - Nord Stream 2 and Turkish Stream. This decision was dictated by Moscow's interest to bypass Ukrainian territory for its gas exports to the EU, as well to slash Ukraine’s revenues from the transit of Russian gas. The contract for the gas transit via Ukraine expires in December 2019, and the parties are currently negotiating a new contract, with the participation of the European Commission79. Gas transit through Ukraine will not be completely bypassed starting from 2020, although Gazprom is moving full steam ahead with the construction of the two alternative gas pipelines:

- **The "Nord Stream 2" gas pipeline**80, which will have a capacity of 55 billion m3 of gas per year and a length of 1230 km. The construction started in September 2018. Russian gas will be exported to Germany via this route. However, the construction of the EUGAL gas pipeline, which extends the Nord Stream 2 on Germany's territory, is due to be completed by the end of 202081;

- The other gas pipeline, **"Turkish Stream"**82, includes two main pipelines with a capacity of 15.75 billion m3 each with a total length of 1850 km. The first line will deliver gas to Turkey, while the other will export to EU countries. Two export options are currently under consideration: to Central and Eastern Europe (Bulgaria, Serbia, Hungary and Austria) or to Greece and Italy. The exports of gas via Turkish Stream can only start after finalizing the infrastructure needed in these countries to receive the Russian gas. Bulgaria is due to build the gas pipeline over the next 2 years83. But the gas pipeline can become fully operational no sooner than 2021-202284. With regard to the second option, Greece and Italy are planning to build the "Poseidon" interconnector, and the investment decision is just about to be taken in the first half of 2019.

Gazprom’s alternative routes to the EU market could become operational after 2022, which would increase the risk of stopping the gas transit via Ukraine. Until then Moldova must have a functional infrastructure to import gas from the EU through Romania. The supplies for Transnistria are also uncertain if there is no gas transit via Ukraine.

Another dilemma regarding the interconnection project is whether Moldova will be able to procure gas from Romania starting from January 2020. Even if the Ungheni-Chișinău section is built by end-2019, the gas imports from Romania are anyway conditioned on the finalization of the works on the Romanian side. Diversification of gas procurement sources is of particular geostrategic importance as Moldova negotiates a new gas import contract with Gazprom. The

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79 Kiyv Post, „Sefcovic to visit Moscow to set date of talks on gas transit to EU via Ukraine“, https://bit.ly/2WJwGDo
80 http://www.gazprom.ru/projects/nord-stream2/
82 http://www.gazprom.ru/projects/turk-stream/
priority objective pursued by Russia will most likely be to maintain the existing contractual arrangement by which it finances the unconstitutional authorities on the Left Bank of the Dniester, whereas Moldovagaz "legalizes" this financing, taking over the entire financial burden for the gas consumed in the Transnistrian region. The country’s dependence on Russian gas is the main instrument which Gazprom uses to compel the Moldovan authorities to accept these unfavorable rules. That constraint will be wound up as soon as the interconnector becomes operational and Chişinău will have leverage to put an end to the existing contractual arrangement. This will significantly contribute to the process to solve the Transnistrian conflict and the reintegration of the country. Even if Moldova would still not be able to import gas from Romania from December 2019, the interconnection project must be carried out taking into account the geostrategic importance and the strengthening of the energy security. Possible delays in Romania should not be a pretext for not completing the pipeline in Moldova.

At the same time, solutions must be found for a possible gas crisis. This can occur at any time, not just because Ukraine would be bypassed but, for example, Gazprom may interrupt gas supplies to Moldova for political reasons, under the pretext of historical debts or with other justifications, even as a leverage to pressure during the negotiation of contracts these years. Ukraine has gas reserves and access to the European gas market, which helped eliminate Gazprom’s monopoly and blackmail shortly after 2014. One must investigate the options for emergency gas supplies from and via Ukraine in case of a possible interruption of the Russian gas. Currently there are several restrictions, both technical and regulatory / commercial. The technical ones stem from the fact that the Ukrainian gas system is designed for a certain level of pressures and flows that would make it difficult to use existing pipelines to supply to Moldova. However, there are also restrictions concerning regulations and practices that could be resolved relatively easily: for example, one of the highest exit tariffs in the Ukrainian system is at the border with Moldova. The authorities of Ukraine and Moldova need to openly discuss these issues, under the Energy Community Secretariat’s mediation. An ideal option would be a comprehensive negotiation on issues of common interest to Ukraine and Moldova with the support of the European Commission, which has, at least in energy, great credibility in Kiev because of EU’s prompt support after 2014 for the diversification of Ukraine’s gas supplies and access to gas in the European market. Several contentious issues between the two states can be best discussed in a trilateral format:

- The issue of the hydropower complex on the Dniester, whose extension would affect the water supply for about 80% of the population of Moldova
- The realistic timeline of Ukraine’s joining the European power system (ENTSO-E); for technical reasons related to the energy flows between the two states, Moldova will have to join Ukraine at the same time with the Ukrainian system, which has an effect on the technical solution for the interconnection with Romania
- Identification of regulatory and technical restrictions that block Moldova’s access to the Ukrainian gas system for flows in both directions. One needs to promote projects that would remove these barriers in the shortest time possible as priority projects for European financing, to avoid a possible energy crisis in Moldova in the coming years. Also, even the interconnector with Romania can be used at maximum capacity only after Moldova has physical and commercial access to the Ukrainian system and its underground gas storage facilities. Currently, even if Moldova would like to import maximum quantities for the future interconnector, only half of the maximum capacity of 1.5-2.2 billion m3 could be used - in the summer - because Moldova has no underground storage capacities. If the two systems were physically and commercially fully interconnected, gas from Romania could be imported continuously, stored in Ukraine, and extracted and carried back to
Moldova in the winter via the current pipelines. By persuading both states to truly become part of the single European energy market and removing technical barriers with investments partly funded by the EU, competition in gas markets could increase, with all consumers having access to all suppliers in the region.

2.4 The obstacles to the construction of the Ungheni-Chișinău gas pipeline

Although more than 4 years have passed since Chișinău announced its intention to carry out this project, developments are slow. Construction works have not yet begun. The finalization of the project and its actual operation depend on the following constraints:

- **Access to materials, technical capacity and human resources.** In Eastern Europe, construction is ongoing for several gas infrastructure projects, increasing significantly the demand for such resources. This could cause gaps and delays. Other investments in the domestic gas infrastructure are significantly lower than the interconnection project. According to ANRE reports, during the period 2015-2018 the subsidiaries of Moldovagaz made investments of MDL 460 million (or about USD 27 million), out of which MDL 327 million for the transport network of Moldovatransgaz. The company built and rehabilitated only about 30 km of transport networks, because it has very limited capacity to attract financing (existing debt to Gazprom for gas consumption).

- **Lack of secondary legislation to ensure non-discriminatory access to natural gas networks (including for cross-border transactions),** balancing of the natural gas system and data exchange with transport systems operators of the neighboring countries. According to Moldova’s commitments under the Energy Community Treaty (ECT), the provisions of the Natural Gas Network Code were to be transposed by October 1, 2018. ANRE has put for consultations the draft network code from November 29, 2018, but is due to approve a decision to implement the new rules. The document includes the harmonized EU-wide procedures for the operation of gas networks, efficient gas flow management and interoperability with neighboring gas systems. An important aspect concerns the methodology to determine the entry / exit points of the gas transmission system, as tariffs are based on these.

- **Tariff policy for gas transportation.** The operation of the interconnector with Romania depends on the tariff for the gas transport, which will be approved by ANRE. If the Agency approves a distinct tariff for gas volumes transported through this pipeline, there is a risk that the tariff will be non-competitive and the imports of Romanian gas will not be profitable. It is necessary to approve a single tariff for the entire gas transmission infrastructure, with redistribution of revenues between the existing operators (Vestmoldtransgaz and Moldovagaz), depending on the volumes of gas transported by each operator. This mechanism is provided by EU Regulation No. 2017/460 approving the Network Code for harmonized charging structures for gas transport, Art.10 (3).

While the Moldovan authorities state publicly since 2014 the importance of the construction of the Ungheni-Chișinău gas pipeline, which is only 120 km, Gazprom managed to finalize the construction of the 930-km long Turkish Stream.

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86 Ibid.
which runs deep under the Black Sea at 2000 m below sea level. The main challenge for the interconnection project with Romania is simple: is there a indeed the political will to end the Moldovan dependence on Russian gas?

3. Construction of the interconnector in Romania

The construction of the Ungheni-Chișinău segment is however only one side of the discussion on Moldova’s access to Romanian gas. For the gas to be enough for the consumption of Moldova, it is necessary to 1) build the necessary infrastructure in Romania to allow the export of gas in the needed quantities of 1.5-2.2 billion of m3; and 2) Romanian suppliers must have sufficient quantities of gas to export to Moldova and must be interested to enter this market.

3.1. Transgaz investments in Romania. Where are we?

At the end of 2018, Transgaz signed the financing contract with the EU for the construction of infrastructure in Romania, consisting of two pipeline sections (Onesti-Gherâesti and Gherâesti-Lețcani, 165 km in total), two compressing stations in Onesti and Gheraesti; and other necessary equipment. The total amount of the project is EUR 174 million, of which EUR 46 million is EU grant, i.e. about one third of the total costs. The pipeline could provide a maximum transport of 1.5-2.2 billion m3.

Just like in Moldova, the project faced various delays at every stage, from the documents necessary to prepare for and access European funds, land expropriations, to organizing auctions. Finally, Transgaz initiated the tenders for the pipelines, compressor stations and other equipment in December 2018. However, only the winners for the compressor stations were announced and contracts signed. At best, the project could only be completed in 2021 - a year or two later than it is now estimated to finalize the works in Moldova. Since without this infrastructure it is not possible to import gas from Romania, Moldova’s negotiations with Gazprom will continue to be difficult and unequal for at least another two years.

There are various reasons for the delays. First of all, Transgaz is involved in Romania in projects that are more visible publicly and politically, in particular the interconnection between Bulgaria-Romania-Hungary-Austria, for which it received significant European funding. The BRUA project is more complex and more expensive, consists of three stages and is an urgent priority as it would also ensure the strengthening of the network needed for access to the Black Sea gas reserves. Even for gas producers, access to other EU markets is more interesting than the Moldovan market. In fact, starting with 2017, Romanian suppliers (especially Petrom) have not sold even the modest quantities that could be physically exported on the Iasi-Ungheni pipeline segment (about 1 million m3 for the town of Ungheni and some small localities in the region).

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90 Transgaz has signed the contracts for the two compressor stations, Financialintelligence.ro, [https://cutt.ly/QiYXk](https://cutt.ly/QiYXk)
Secondly, Transgaz was caught up in political talks and pressures. In 2018 and 2019 there was a fairly serious conflict between Transgaz executives and the main shareholder of the company, the Ministry of Economy of Romania, on the obligation to transfer certain amounts to the state budget as dividends, even in advance. If in previous years Transgaz had to pay up to 90% of profits as dividends, this year the shareholders’ representatives requested for just 50% of the 2018 earnings to be distributed. They argued that they cannot tap deeper into the reserve funds (which are already diminished by the additional taxes imposed by the Emergency Ordinance 114, explained below) and that there are firm commitments to finance the investment projects.

At the end of April 2019, Transgaz shareholders once again rejected the request of the Romanian state to distribute dividends 90% of the profit in 2018, and the issue would be settled at the next General Assembly of Shareholders in June 2019. Misunderstandings and conflicts arose regarding the investment plan 2018-2027: after it was rejected by shareholders in March on the grounds that the proposed projects lack sufficient funding or that their source is uncertain, at end-May Transgaz added a rather controversial and expensive project, Eastring, at the request of the principal shareholder, the Ministry of Economy. Interestingly, in this new investment plan (still unapproved), interconnection with Moldova remains one of the priorities, but at a slightly higher cost (EUR 174.25 million) and a 2-year delay (2021). One of the reasons for the controversies on the investment plan might also be certain political pressures for Transgaz to offer contracts to political clients. Transgaz would be asked to build distribution networks in some localities (though distribution is not among the company’s business lines) and contracts to be awarded to companies close to the economy minister and the Social Democrat Party. Unfortunately, the main beneficiary of all these delays and pressures is Gazprom: delays incurred in projects to strengthen the gas transmission network in Romania and in interconnections with the neighboring countries mean delays for Gazprom to have a competition for the supply of natural gas in the region.

3.2. Romania’s capacity to deliver gas to Moldova - reasonable and feasible?

Even if the infrastructure is built, the question is whether gas will actually flow between Moldova and Romania. To answer this question, one must analyze the context of the Romanian gas sector in recent years. In 2012-2016, reforms took place in Romania which led to the liberalization of the gas market, to a significant reduction of consumption and imports and to stronger institutions that govern the sector, in particular state-owned companies (of interest to us, Romgaz and the Transgaz transmission and system operator) and the Romanian energy regulator – also called ANRE.

Since 2017, however, we note reversals. ANRE was again under political pressures from the Parliament, who initiated investigations committees into the regulator’s activity with unclear mandate. The Parliament eventually appointed a much more politically obedient leadership upon the expiry of the mandate of the Regulatory Committee in October 2017. The profitable state-owned companies (including Romgaz or Transgaz) were further forced to distribute

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dividends of about 90% of profits, mainly to cover budget deficits, and often these dividends had to be paid in advance. This discourages investment; Transgaz, in particular, has an investment plan that includes European projects that require co-financing from own funds or reimbursable commercial loans, in particular BRUA - the Bulgaria-Romania-Hungary-Austria interconnector; and the project for interconnection with Moldova, which includes two segments of the Oneşti-Gherăieşti-Leţişeni pipeline and two compressing stations. Last but not least, in 2018, two major regulatory acts with a major impact on the gas market were approved: the offshore hydrocarbons law and the Emergency Ordinance 114. The first severely restricts the interest of investors in deep offshore deposits in the Black Sea, introducing a tax regime adopted without an impact study and the obligation to trade 50% of gas production on centralized platforms in Romania (a possible implicit export ban). Ordinance 114 (GEO 114) again regulates the gas and electricity markets (especially for households) by 2022 and introduces a 2% turnover tax on (almost) all energy companies, a tax which appears to have significantly reduced the interest of natural gas producers in both existing and new reserves. For example, through the new regulation of the gas market, both Petrom and Romgaz, which also have gas-fired electricity generation units, were even forced to import Russian gas for their own electricity production and generally reduced their gas production, while imports have increased94. It should also be noted that, with the change of the regulator’s management, ANRE was far less vocal than before on the legislative initiatives that blocked the smooth functioning of the market, elaborating without comments the necessary regulations to implement the new laws. Beyond the concrete provisions of the two laws and the related regulations, which are indeed restrictive for investors, the main issue claimed by investors is the total unpredictability of the legal and regulatory framework95. Also, the increase in gas imports as a result of GEO 114 increases Romania’s vulnerability to a possible cut of Russian gas transit via Ukraine in the next 2-3 years, which would leave us totally unprepared96.

To understand the broader context, Romania has two major gas producers, Romgaz (50%) and Petrom (45%, in 2018) and another 6 small producers, producing a total of about 10-11 billion m3 / year from the current deposits in operation, most of them on-shore. Gas imports can reach about 5-10% of gross consumption under normal conditions, depending on the variations in consumption, energy demand, and winter temperatures. The liberalization of the gas market for industrial consumers after 2014 has reduced their consumption, especially the consumption of the Interagro fertilizer group, and reduced imports (from Gazprom through intermediaries), which previously stood at 20-30% of total domestic consumption. In other words, liberalization has increased energy independence in 2013-2016, and from 2017-2018 we see the reversal of this trend.

In theory, Romania can produce enough gas for its own consumption, while Russian gas imports are needed only to cover some winter peaks because of technical restrictions (especially the pressure required for normal gas flows). In the last 3-4 years, significant offshore gas fields have been discovered in the Black Sea by the concessionaires of these perimeters. ANRM (the mineral resource agency managing the exploration and exploitation licenses) estimates today that the potential of the Black Sea deposits amounts to about 200 billion m397. Even if on-shore production is declining (most of the deposits are old and require increased investment to maintain production levels), the Black Sea gas could

97 Ziar MM: [https://ziarmm.ro/anrm-marea-neagra-are-un-potential-de-este-200-de-miliarde-de-metri-cubi-de-gaze/](https://ziarmm.ro/anrm-marea-neagra-are-un-potential-de-este-200-de-miliarde-de-metri-cubi-de-gaze/)
offset the reduction in Romanian production in the following years and could be an important source for the countries in the region, Bulgaria (with a consumption of about 3 billion m3); Moldova (1 billion m3) and Hungary (about 10 billion m3 and decreasing).

**Figure 2. Deposits and current extraction**

![Map showing deposits and current extraction](https://www.romgaz.ro/ro/content/explorare)

Source: [https://www.romgaz.ro/ro/content/explorare](https://www.romgaz.ro/ro/content/explorare)

**Figure 3. Off-shore concessions in the Black Sea**

![Map showing off-shore concessions in the Black Sea](http://rbsta.ro/ro/harta-concesiunilor-offshore-romania/)


But this is only possible if the Black Sea investors who are more advanced in the exploration activity and have already discovered commercially exploitable deposits (currently Petrom - Exxon and Black Sea Oil and Gas BSOG) will be able to produce natural gas, will have access to the infrastructure and the Romanian and regional markets. Even if they have already invested large amounts of exploration, investors are not willing to risk losing billions more of euros by investing in an unpredictable legislative environment, as such investments would be recovered in several years; there are investment alternatives (major findings) in other countries; natural gas will face further constraints on GHGs emissions and other future environmental regulations; and the transition to renewable energy sources in the world is accelerating.
Unfortunately, Romanian lawmakers are fairly disturbed by the outside world and are mistakenly relying on the fact that if they have already spent significant sums for exploration, investors will remain captive in the Black Sea⁹⁸. The two laws - offshore and GEO 114 - caused a shock in the market: Petrom announced the postponement of the investment decision⁹⁹, and BSOG maintains its decision provided that all recent changes to the "rights of the concessionaires" are abrogated (in essence, the provisions on taxation and restrictions on the free trade of gas, i.e., precisely the controversial provisions of the offshore law and GEO 114)¹⁰⁰. GEO 114 is challenged by the entire affected business environment (banking, telecommunications, energy); has already been amended; and there are currently discussions in Parliament to be repealed altogether¹⁰¹. Even if both laws were substantially amended or even abrogated, the damage has already been done: investor confidence in legislative and regulatory stability is strongly affected.

The question that arises from these developments is whether the government of Romania (including Transgaz) is indeed committed to finalize the interconnection with Moldova. Most likely, Transgaz will build, although delays, the infrastructure on both sides of the Prut. On the other hand, it is questionable whether there will be enough gas in Romania for exports, at least until the completion of the Southern Corridor and the strengthening of the Bulgarian network, which could bring gas from the Caspian Sea in the region in a few years. It is also unclear why, despite the fact that there are already interconnectors with Romania (the transit pipelines through which Gazprom exports gas to Bulgaria today and transits Ukraine and Moldova), they can not be used, though this would definitely require much less investment for the connection with the Transgaz national network and to ensure the reverse flow to Isaccea. The reverse flow is, moreover, an older European priority and the connection is even closer to the Black Sea gas fields. Although this pipeline must, in theory, provide third-party access to the network by the European rules (i.e. non-discriminatory access to the available capacity for suppliers other than Gazprom), this is not always the case in EU territory¹⁰². Probably, it is even more difficult to enforce EU rules on the pipeline in Moldova or even Ukraine.

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⁹⁸ The expression "the dog does not leave the butcher’s shop", in the broader context of a strong nationalist rhetoric against foreign corporations, has been heavily used by various commentators and politicians in relation to investors in the Black Sea.  
¹⁰² See Romania chapter in "War by other means"
Conclusions and recommendations:

- **Raise the energy security of Moldova among the list of priorities of the Chișinău authorities, but also in Bucharest.** Regardless of Gazprom's negotiations this year with Gazprom, the likelihood that Gazprom will bypass transit through Ukraine over the next 2-3 years is real, and solutions must be found urgently for Moldova to avoid a serious energy crisis. Also, the possibility to cut gas supply, even before the bypass of Ukraine, increases Gazprom's negotiating power within the next few months. Chișinău must be aware of these risks and urgently plan measures to speed up interconnection; negotiate emergency gas supplies with Ukraine; implement reforms to open up the market; and pursue an advocacy strategy in Brussels in the coming months to keep the region in the attention of the new Parliament and the new Commission, as the new 2021-2027 budget is being drafted.

- **Transparency in the construction process.** Create an online platform to monitor the progress of the gas pipeline construction on the territory of Romania and Moldova, with the technical possibility of integrating other bilateral energy projects on the same platform (the electricity interconnection Isaccea-Vulcanesti-Chișinău). Transparency will also support the public credibility of the interconnection with the European energy market and the better public understanding that the EU does not want to replace the Gazprom monopoly with another, but rather offer alternatives to Moldovan citizens and consumers.

- **Accelerate the effective unbundling of the network from suppliers.** Establish a calendar for the unbundling for gas (separation of Moldtransgaz from Moldovagaz) and for the subsequent certification by ANRE, supervised by the Energy Community Secretariat. This is a major emergency in order to ensure the access of Romanian gas to distribution networks and to the Moldovatransgaz transport network.

- **Set up a gas market by finalizing the secondary legal framework.** Enhance the procedures to adopt the five technical codes (interoperability, balancing, capacity allocation, congestion management and transport tariff methodology), including through the involvement of the Expert Council, which enables civil society to be involved. In order for the Romanian suppliers to enter the Moldovan market, the market needs to be functional.

- **Fully implement the principles of the Third Energy Package.** The transposition of directives and adoption of secondary legislation is not sufficient, unless the principles in this package are fully embraced, which means developing competitive, transparent markets for the benefit of consumers. Even if the pipeline is to be built, this is not a guarantee that the Romanian suppliers will sell on the Moldovan market. The decisions made by Chișinău authorities send signals that are essential for the investors’ and suppliers’ trust. Certain issues are being followed closely by these suppliers, but also by potential investors in the Moldovan energy sector. These are:
  
  - The procedures for the electricity imports, whether they are procured in fact through a competitive or non-transparent procedure;
The reasons for the departure of an investor in electricity distribution (Union Fenosa) and who is the new concessionaire (who is behind the investment fund in London that took over the management of these networks);

How negotiations with Gazprom will take place and the extent to which the contractual clauses could block other suppliers’ access after the physical interconnection with Romania is finalized;

The situation of gas debts in Transnistria and the extent to which the Chișinău authorities take concrete steps to separate these obligations;

The position of the authorities in Chișinău on the issue of the cryptocurrency scheme in Transnistria - for example, the fact that the equipment necessary for the production of cryptocurrency passed unhindered through the Moldovan and Ukrainian customs.

**Strengthen strategic efforts in the relationship with Ukraine.** Establish an official strategic dialogue between Moldova and Ukraine to prevent crisis situations and manage the consequences of third party actions (Russia) in the region, including by setting up an executive energy crisis unit. It is possible to imagine a format of tripartite talks - Ukraine, Moldova and the EU for the negotiation of a "package": to accelerate interconnections; emergency supplies of gas and electricity in Ukraine in the event of a disruption of Russian gas supply; but in the same package other issues disputed between Moldova and Ukraine could be discussed, such as the extension of the Dniester Hydropower Complex. In gas, one needs to identify the measures needed to ensure that gas from Ukraine is accessible to Moldova, but also that Moldova could use Ukrainian gas storage facilities, especially after the interconnection with Romania is finalized. The two countries should prepare a Roadmap with technical measures (infrastructure projects to remove bottlenecks to physical gas flows) and measures to harmonize the regulatory and commercial framework. EU funds could be made available for infrastructure projects that are well justified for the better integration of Moldova and Ukraine into the single European energy market. These issues should be discussed quickly in order to seize the opportunity during the negotiations for the Multi-Annual Fiscal Framework (the EU budget for the period 2021-2027) currently in Brussels.

**At a broader level, the authorities in Chișinău must be well connected to European political developments and seek support for their cause.** The elections of May 2019 did not produce populist majorities, as feared, and this may spell good news for the EU's future approach to the Eastern Partnership, which is now under evaluation after 10 years of implementation. For the Eastern Partnership, it is essential that the EU keeps these countries on top of its agenda and continues to dedicate earmarked financing and specialized institutions to it. This means to maintain the European Neighborhood Instrument and institutions, in particular DG NEAR, which has dedicated staff with a wide knowledge of the region; and not to replace external assistance with a single fund allocated to all non-EU countries. It is essential that these financial and institutional tools continue to be devoted to projects, including infrastructure, to regional energy interconnection and to reducing Russia’s energy influence in Eastern Partnership countries and Eastern EU Member States. The willingness of Chișinău authorities to push for energy reforms and the acceleration of interconnection projects will send the right signals to Brussels and may also facilitate possible funding for infrastructure to diversify Moldova's access to energy in Romania and Ukraine.
Annex:

Box 1. Ungheni-Chișinău pipeline in figures

Technical parameters of the Ungheni-Chișinău pipeline:
- Length – 120 km
- Maximum capacity – 1,5 – 2,2 billion m³/year

Potential beneficiaries in Chișinău:
- 279,949 households;
- 4,950 non-households;
- 292 industrial users.

Chișinău infrastructure managed by "Chișinău-gaz":
- 3034,525 km pipeline;
- 53 pressure control points;
- 3545 pressure control stations;
- 374 cathodic protection stations
- 158 gas detection nodes.

Infrastructure needed in Romania:
- Two pipeline sections: Onești-Gherăești (104 km) and Gherăești-Lețcani (61 km), cca 165,15 km
- Two compressor stations, at Onești and Gherăești
- Safety and protection elements of the pipeline, control system and data management

Box 2. Gas consumers in 2017, (%)

- Energy sector – 39,8
- Households – 31,4
- Companies – 24,1

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Public institutions – 4,7

Source: ANRE

Box 3. Timeline Iași-Ungheni-Chișinău by June 2019

2014, August - Completion of the Iasi-Ungheni segment;
2015, June - Approval of the roadmaps for energy interconnection projects with the European Union (Romania);
2016, June – Approval of the Applicant’s Guide for the Large Infrastructure Operational Program 2014-2020 - increase the electricity and gas transport capacity;
2016, December - Financing agreements signed with the EBRD and the EIB for gas pipeline construction to Chișinău;
2017, October - Announcement of the privatization tender for "Vestmoldtransgaz"
2018, March - Privatization contract is signed;
2018, September – The privatization process is completed; announcement of the tender for execution of the construction works;
2019, November – (Romania) Financing contract signed with the European Commission for Onesti-Gherăesti-Lețcani;
2019, January - Contract for the 1st lot of works is signed;
2019, February - Transgaz launches infrastructure auctions in Romania (unfinished);
2019, March - Contracts for lot 4 is signed;
2019, April - Contracts for lots 2, 3, 5, 6 and 7 of works are signed;
2019, May - Transgaz signs contract for all Ungheni-Chișinău pipeline construction
2019, June – (Romania) Transgaz selects winner and signs contracts for the two compressor stations