



The State of Gas Market Integration in the Energy Community

**Special report for the CESEC
High Level Group Meeting**

Bucharest 28 September 2017

Energy Community Secretariat

Introduction



In March 2017, the Energy Community Secretariat (hereinafter 'the Secretariat') adopted its strategy for establishing functioning gas markets in the Energy Community and fostering pan-European gas market integration. The *Energy Community Gas Action 2020*¹ outlines legal, market and infrastructure measures needed to help overcome shortcomings of the present gas infrastructure connectivity and market structures and attain more liquidity, competition, diversification and security of supply in the Energy Community region as defined by Title III of the Energy Community Treaty. It provides a concerted effort towards infrastructure and market development as well as security of supply, recognizing the link between them. While gas market integration relies on interconnecting infrastructure, the latter requires functioning market structures as a precondition for efficient and cost recovering usage.

The *Energy Community Gas Action 2020* also aims at providing a close-up

of reform measures to be undertaken by the Energy Community Contracting Parties (hereinafter 'Contracting Parties') and on their interfaces with EU Member States in order to reach the obligations of the CESEC 2.0 Action Plan.

The present report provides an overview of the current status of implementation of the 3rd Internal Energy Market Package (hereinafter '3rd Package'), as incorporated in the Energy Community *acquis communautaire* ('acquis') by Decision 2011/02/MC-EnC of the Energy Community Ministerial Council, as well as of the actual market development in the Contracting Parties. The analysis covers the Contracting Parties with operational gas markets that are interconnected with other countries in the Energy Community region², namely: Albania³, Bosnia and Herzegovina, former Yugoslav Republic of Macedonia, Moldova, Serbia and Ukraine. In addition to national developments, the report also deals with activities directed towards regional market integration,

1 https://www.energy-community.org/dam/jcr:7ea2720c-7b65-4d12-9c61-56f59444b147/WS_Gas_032017_background.pdf

2 Not being integrated with other countries of the Energy Community region, Georgia is not included in this report. Nevertheless, retail gas prices are shown also for this Contracting Party for illustrative reasons.

3 Due to TAP project development, Albania is considered in this report as a Contracting Party with an operational gas market.



namely implementation of EU gas network codes and guidelines in the Contracting Parties in general, progress related to interconnection agreements between the transmission system operators of the Contracting Parties and neighboring EU Member States as well as the latest discussions around implementation of capacity allocation platforms as foreseen

by the network code on capacity allocation⁴ in the region.

On the infrastructure side, the present report informs about the development of the gas interconnector between Bulgaria and Serbia, a Project of Energy Community Interest and the only Contracting Party Priority Project under CESEC.

Current status of 3rd Package implementation and market development

The present report assesses the level of gas market development in the Energy Community Contracting Parties both from the perspective of *de iure* compliance with Energy Community law as well as actual implementation. On the legal side, the analysis is made against the set of requirements stemming from the 3rd Package, namely: unbundling of gas transmission system operators (TSOs), third party access, entry-exit transmission tariffs, capacity allocation and balancing as a facilitator of market liquidity. Beyond that, the assessment also reflects on the level

of market liquidity and the implementation of adequate security of supply rules. The current level of gas market development is further illustrated by the market prices supply ratio⁵ and retail gas prices for households and industry in 2016.

Each of the presented indicators considers both the level of transposition and implementation in practice⁶. Detailed explanations of the performance per indicator and Contracting Party can be found on next page.



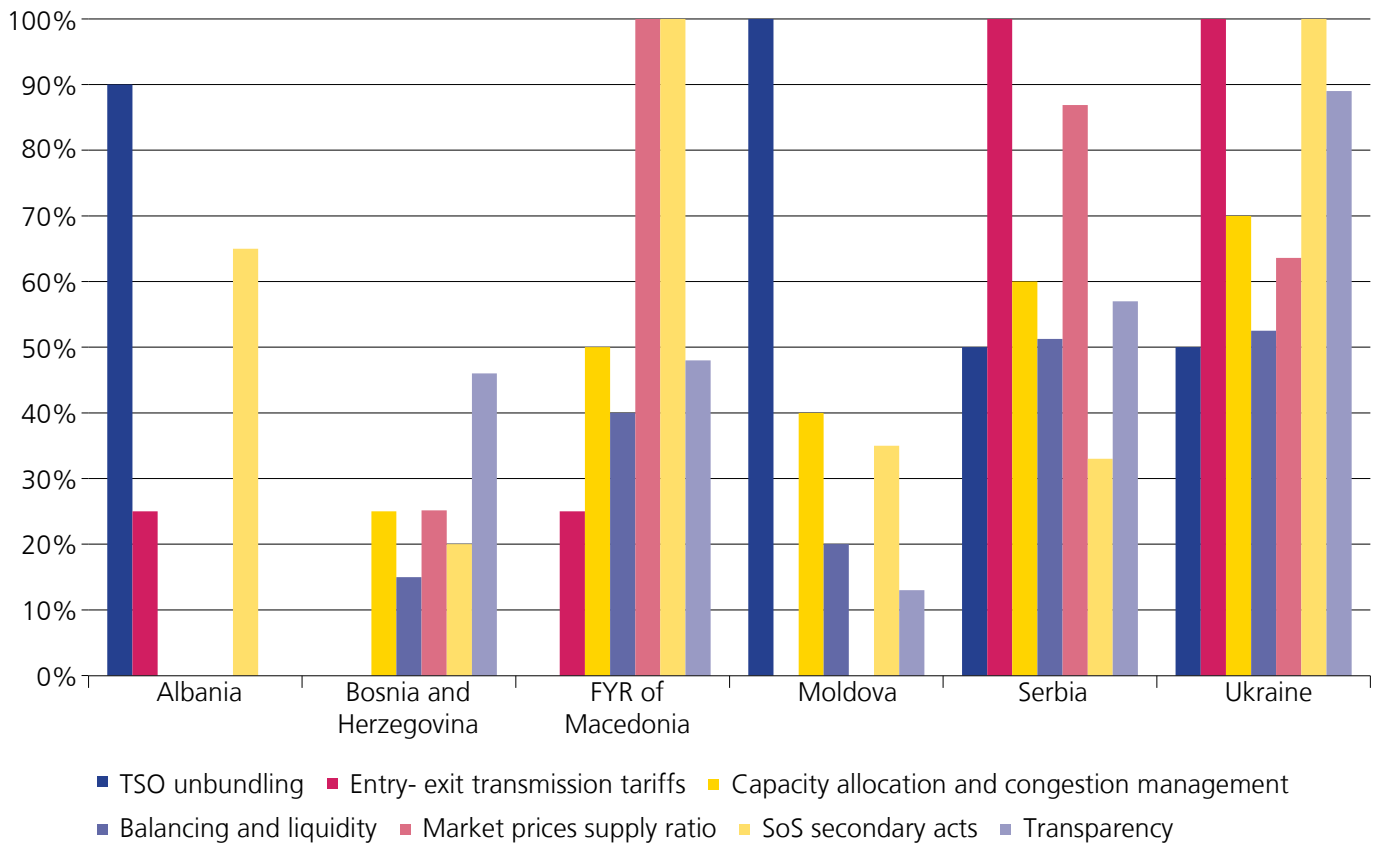
⁴ Commission Regulation (EU) 2017/459 of 16 March 2017 on establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) 984/2013, OJ L72/1, 17.03.2017.

⁵ i.e. the percentage of gas consumption in 2016 supplied at non-regulated prices.

⁶ The level of transposition can build up to a maximum of 50% per indicator.



Figure 1 Overview of implementation of selected gas market development preconditions per Energy Community Contracting Party



source: Energy Community Secretariat's materials for Annual Implementation Report and CESEC Monitoring Reports

Note: For Albania, only performance related to TSO certification, adoption of security of supply acts and the level of transposition of other secondary acts can be assessed. TSO unbundling for Moldova is assessed against the 2nd Energy Package, because the deadline for 3rd Package compliant TSO unbundling and certification for Moldova was set for 1 January 2020.



3rd Package transposition

Albania transposed the 3rd Package into national legislation by the 2015 Law on Natural Gas Sector, which is widely compliant with the acquis.

TSO unbundling

The operator of TAP, *TAP AG*, was unbundled and certified as an independent transmission operator by the country's national regulatory authority ERE on 31 March 2016. In December 2016, the Council of Ministers established a new company, *Albgaz*, designed as a combined operator performing transmission and distribution of gas. Following the company's application, ERE adopted a preliminary certification decision on 26 May 2017, which was submitted to the Secretariat for its opinion. *Albgaz* is planned to be certified by the end of 2017 at the latest.

Transmission tariffs

Albania's primary legislation envisages the establishment of a separate tariff for each entry and exit point to/from the transmission grid. However, the tariff methodology is still under preparation.

Practical implementation of the transmission tariff methodology is subject to gas market development.

Capacity allocation and congestion management

Development of secondary legislation covering rules for capacity allocation and congestion management in the gas transmission network started in December 2015 and should be finalized by the end of 2017. Implementation of such rules is subject to gas market development.

Balancing and liquidity

A governmental decision *On Approval of the Natural Gas Market Model*, including balancing related provisions of Regulation (EC) 715/2009, is under preparation.

Security of supply

The primary legislation transposes the general provisions of Directive 2004/67/EC concerning measures to safeguard security of natural gas supply as well as the 3rd Package related security of gas supply provisions. The Government adopted the Natural Gas Emergency Plan, developed with the Secretariat's assistance. However, Albania did not submit nor publish the annual Security of Supply Statement for natural gas.

Eligibility and switching

All (future) gas customers in Albania are allowed to freely choose their supplier. Household customers and small enterprises are entitled to regulated gas supplies under public service obligations for which the rules are still to be developed. Supply of last resort is foreseen for all customers.



3rd Package transposition

In Bosnia and Herzegovina, country-wide gas market legislation and related regulatory competences do not exist. Only the gas market in Republika Srpska is regulated by a Gas Law, which is still, however, not compliant. In Federation of Bosnia and Herzegovina, a 2007 government decree fails to transpose any key principle of the gas acquis. The country is subject to infringement cases in this context, as well as penalizing measures by the Ministerial Council.

TSO unbundling

Two out of the three natural gas undertakings engaged in transmission system operation are fully bundled with supply or trade activities: *BH Gas*, the transmission system operator in Federation of Bosnia and Herzegovina also acts as importer for the entire Federation of Bosnia and Herzegovina; *Sarajevogas Istocno Sarajevo* is licensed for transmission, distribution and supply of natural gas in Republika Srpska. The third gas undertaking, *Gas Promet*, is responsible for transmission system operation only. However, it is not unbundled according to the 3rd Package.

Transmission tariffs

Gas transmission tariffs in the Federation of Bosnia and Herzegovina were never adopted, published or applied. There is also no regulatory authority with related competences in place. In Republika Srpska, the methodology for calculation of grid tariffs has been developed, however, it is implemented only for a spur of the transmission pipeline Karakaj – Zvornik. The existing methodology does not envisage a separate tariff for each entry/exit point to/from the transmission network.

Capacity allocation and congestion management

Legislation of the Federation of Bosnia and Herzegovina envisages negotiated access based on decisions of the ministry in charge of energy. Regulated access exists in Republika Srpska. The transmission network code of *Gas Promet* provides for allocation of both long- and short-term capacity, on a firm and interruptible basis. Congestion management procedures do not envisage the re-offer of unused capacity to the primary market on a day-ahead and interruptible basis in case of contractual congestion nor the possibility for capacity trade on a secondary market.

Balancing and liquidity

Gas Promet balances its transmission network by using line-pack, with a tolerance level of 2-5%. Network users are requested to provide balancing gas in case the TSO is not able to provide it. Moreover, no imbalance charge is calculated and implemented. For the other two transmission networks, balancing rules are not prescribed.

The gas market of Bosnia and Herzegovina is illiquid. The domestic incumbents *BH Gas* and *Energoinvest* are parties to an import contract with *Gazprom*, which is renewed annually, and a transit contract via Hungary in force until 2018. Transit via Serbia is subject to a contract between *BH Gas* and *Srbijagas* that is in force until the end of 2017. Neither an organized exchange nor any other trading platform (e.g. virtual trading point or balancing platform) is in place.

Transparency

Gas Promet and the regulatory authority of Republika Srpska publish the following information required by Regulation (EC) 715/2009:

- procedures for connection,
- tariff methodology and applicable tariffs,
- capacity allocation mechanism and congestion management procedures,
- information on services offered by the transmission system operator as well as technical information necessary for access to the network,
- most of the technical information necessary for network users to gain effective access to the system, for all relevant points (technical capacity for flows in both directions, contracted firm and interruptible capacity, nomination and re-nomination, available capacity, actual physical flows), however, without the relevant historical information.

Information that is still not published by the TSO relates to: planned interruptions of firm and interruptible capacity, measured values of the gross calorific value or the Wobbe index as well as information regarding the transmission system (refer to Article 3(4) of Annex I of Regulation (EC) 715/2009).

The two other companies responsible for gas transmission in Bosnia and Herzegovina do not fulfil transparency requirements at all.

Security of supply

Bosnia and Herzegovina is not compliant with Directive 2004/67/EC. Only Republika Srpska transposed its core provisions on its territory, though without the definition of supply standards. Bosnia and Herzegovina did not submit nor publish the 2017 Security of Supply Statement for natural gas.

Eligibility and switching

All natural gas consumers in Federation of Bosnia and Herzegovina are supplied by their incumbent at regulated prices. In Republika Srpska, there were three suppliers in the retail market in 2016, the biggest supplying more than 90% of

Bosnia and Herzegovina



the total quantities sold. All households are supplied by their incumbent supplier at regulated prices. Prices for non-house-

hold customers are not regulated. Still, no customer changed supplier in the last two years.





3rd Package transposition

Former Yugoslav Republic of Macedonia did not transpose the 3rd Package yet. The Energy Law of 2011 only transposes the 2nd Package requirements.

TSO unbundling

GAMA, the country's gas transmission system operator, is part of a vertically integrated company which does not comply with the unbundling requirements of Directive 2009/73/EC. The state (controlling the entire production of electricity in the country) and *Makpetrol*, the biggest gas importer and supplier, are the only shareholders of *GAMA*.

Unbundling and certification are not possible without a legislative framework in line with the 3rd Package, which is still under preparation. The regulatory authority finalized draft certification rules, the adoption of which is conditioned by the approval of the primary law.

Transmission tariffs

The applicable transmission tariff methodology does not allow for the individual setting of tariffs for entry and exit points from the system. The regulatory authority has prepared the draft entry-exit tariff methodology. However, its adoption and implementation is subject to approval of primary legislation.

Capacity allocation and congestion management

Capacity allocation rules are covered by two documents, namely the Transmission Network Code of *GAMA* ('the Network Code') and the Market Rules issued by the regulatory authority. The Network Code provides the possibility for allocation of both firm and interruptible capacity, however, there is no obligation for the TSO to offer both such types of capacity. According to the Network Code, the TSO may sell annual and monthly capacity⁷. In case the demand for firm capacity should exceed the available capacity, the TSO is obliged to offer interruptible capacity; a time-interval for such an offer is not prescribed. A provision allowing network users to re-sell or sublet their unused contracted capacity on the secondary market is not included in the Network Code.

The regulator's Market Rules envisage the preparation of rules for capacity allocation that are supposed to lead to full 3rd Package implementation, but such rules have not been finalized yet. Potential overlapping of rules covering allocation of capacity and congestion management should be avoided.

Balancing and liquidity

The existing balancing-related provisions of the Network

Code and Market Rules are not fully harmonized, e.g. tolerance levels are different. The Code for natural gas and ancillary services envisaged in the Market Rules is still not published. Several important elements of Regulation (EC) 715/2009, such as the provision of information on the balancing status to network users and the calculation of imbalance charges, are transposed in the Network Code, but the imbalance charges are not published.

The gas market of former Yugoslav Republic of Macedonia is illiquid. Natural gas is imported from Russia through the single entry point at the Bulgarian border. Gas is mainly consumed by industrial customers, whilst households have an almost negligible share of total consumption due to the very limited spread of distribution networks. *Makpetrol* imports gas under a contract with *Gazprom* and three big consumers import gas individually for their own needs, also at the Bulgaria-former Yugoslav Republic of Macedonia border.

Transparency

Required information is currently published in accordance with the methodology for calculation of transmission charges, gas market rules and the transmission network code and relates to:

- tariff methodology and applicable tariffs,
- capacity allocation mechanism and congestion management procedures.

The transmission system operator does not publish information as required by Annex I of Regulation (EC) 715/2009.

Security of supply

Former Yugoslav Republic of Macedonia transposed the security of supply acquis and submitted the Security of Supply Statement for 2017.

Eligibility and switching

All customers are eligible to choose their suppliers and the end-user prices of gas are not regulated. In practical terms, only seven big customers changed suppliers, one of them in 2016. Around 73% of gas consumed in former Yugoslav Republic of Macedonia in 2016 was imported directly for own needs by the district heating producer *BEG Proizvodstvo* and combined cycle power plant *TE-TO AD Skopje*. In addition to this, two traders imported gas for the wholesale market: *Makpetrol* and *Kogel stil*. On the retail market, there were six active retail suppliers in 2016.

There are around 200 households connected to the distribution networks in Strumica (180) and Kumanovo (20).

⁷ i.e. long- and short-term capacity



3rd Package transposition

With the adoption of the Law on Natural Gas in May 2016, Moldova transposed the 3rd Package.

TSO unbundling

Both transmission system operators, *Moldovatransgaz*, a daughter company of *Moldovagaz*, and *Vestmoldtransgaz*, function as legally separate network companies and the core measures ensuring their organisational and decision-making independence are formally in place. Legal and functional unbundling applies as an interim legal regime before one of the unbundling models envisaged by the 3rd Package will be implemented, *i.e.* no later than by 1 January 2020. *Tiraspol-transgaz* is another daughter company of *Moldovagaz*, operating a transmission system on the left bank of Dniester River.

Transmission tariffs

The applicable transmission tariff methodology does not allow for the individual setting of tariffs for entry and exit points. The regulatory authority, in cooperation with the Energy Community Secretariat, initiated a process of preparation of an entry/exit transmission tariff methodology.

Capacity allocation and congestion management

The Law on Natural Gas transposes principles of third party access to transmission networks in compliance with the 3rd Package. The currently applicable Regulation on Access to the Natural Gas Transmission Network and Congestion Management provides rules for allocation of monthly and annual capacity for time-horizons up to five years. Interruptible capacity shall be offered in case of contractual congestion. Detailed rules on secondary market trade of capacities are also in place. There is an ongoing project of ANRE and the Secretariat related to preparation of fully compliant transmission and distribution network codes in Moldova, which is to be finalized by the end of 2017.

Balancing and liquidity

The Regulation on Access to the Natural Gas Transmission Network and Congestion Management includes fair,

non-discriminatory and transparent balancing rules, but lacks provisions related to calculation and payment of imbalance charges. It remains unclear to which extent the balancing rules are implemented in practice.

The gas market of Moldova is illiquid. In 2016, out of 1.038 bcm of contracted gas imports more than 99% were acquired from *Gazprom*. Another 2 bcm were delivered by *Gazprom* to Transnistria and mainly used for electricity generation, covering the biggest share of total electricity demand in entire Moldova. Liquidity may be improved by diversification of gas supplies in Moldova, more precisely by making operational the interconnector with Romania through the Iasi-Ungheni pipeline and, in particular, via its projected extension to Chisinau. In December 2016, Moldova signed loan agreements with EBRD and EIB for financing the Ungheni-Chisinau pipeline extension. The loans are conditioned by the implementation of an Action Plan in cooperation with the Secretariat.

Transparency

The transmission tariff methodology and the resulting tariffs as well as the procedures and charges for connection are published.

All other information required for access to the transmission network is not published.

Security of supply

Although the Law on Natural Gas transposes the security of gas supply acquis, Moldova still did not adopt the relevant secondary acts, such as an emergency plan with an accompanying action plan securing reliable and efficient gas supplies. However, Moldova submitted the annual Security of Supply Statement year.

Eligibility and switching

All customers are eligible to freely choose and switch their gas supplier. In practice, however, only incumbent suppliers are active in the market. Rules and procedures for supplier switching are yet to be developed. End-user price regulation is applied to all customer categories.



3rd Package transposition

Serbia's gas sector is governed by the Energy Law, which transposes the 3rd Package.

TSO unbundling

The Government's 2016 action plan on unbundling of *Srbijagas*, based on an ITO model, failed to yield tangible results. *Srbijagas* continues to be engaged in both supply and transmission. *Transportgas Srbija*, established in 2015, is only a shell company incapable of performing any of the functions stipulated by law. *Transportgas Srbija* is not functionally unbundled from its parent *Srbijagas*.

Yugorosgaz Transport, via its mother company *Yugorosgaz JSC Belgrade* indirectly controlled by *Gazprom*, applied for certification under Article 11 of Directive 2009/73/EC in autumn 2016, in line with the independent system operator model. Deviating from the Secretariat's opinion on the preliminary certification decision, the regulatory authority in June 2017 adopted a final certification decision despite the fact that *Yugorosgaz Transport* did not comply with 3rd Package unbundling requirements and Serbia did not properly carry out the security of supply assessment required by Article 11 of Directive 2009/73/EC.

Transmission tariffs

An entry-exit transmission tariff methodology allowing for the setting of individual tariffs for all entries to and exits from the system is implemented for both entry-exit zones in Serbia.

Capacity allocation and congestion management

The transmission network codes are generally harmonized with the requirements of Regulation (EC) 715/2009 related to capacity allocation mechanisms and congestion management procedures. TSOs offer annual, monthly and daily capacity, both firm and interruptible. Yearly capacities are offered for up to three years ahead. In case the total requested capacity exceeds the available capacity, allocation is done on a *pro rata* basis. The transfer of capacity rights (subletting) is allowed for annual capacities only.

In practice, neither *Srbijagas* nor *Yugorosgaz Transport* have ever performed capacity allocation according to the Codes. In 2016 *Srbijagas* announced an offer of yearly capacity, except for the interconnection point Horgos - without a relevant explanation. The Codes are thus not implemented, which contributes to the foreclosure of the gas market in Serbia and breaches the acquis.

Balancing and liquidity

The balancing rules defined in the network code of *Srbijagas* are compliant with Regulation (EC) 715/2009. Imbalances are determined on a daily basis, with imbalance charges calculated

based on the monthly neutral gas price approved by the regulatory authority. Serbia is one balancing zone, which in theory means that the users of the system of *Yugorosgaz Transport* fall under the balancing provisions of the *Srbijagas* network code. In practical terms, the balancing rules are not applied.

The Serbian gas market is highly concentrated. Gas is imported from the Russian Federation via a long-term agreement with the incumbent *Srbijagas*, which accounted for 84% of total demand in 2016. The remainder was produced by the only domestic producer, *Naftna Industrija Srbije (NIS)*. *Srbijagas* sells imported gas to retail suppliers. In 2016, another wholesale trader, *L-Gas*, was buying gas from *NIS* and selling it to retail suppliers. The network code establishes a virtual trading point where gas may be traded. However, wholesale traders are still selling gas on the exit points to distribution networks to retail suppliers. Without third party access provided to all relevant points of the transmission system, further market development in Serbia cannot be expected.

Transparency

The majority of the requirements of Directive 2009/73/EC and Regulation (EC) 715/2009 related to transparency of the transmission system operators are fulfilled via publication of the transmission network codes. Also, the most important information needed for access to the system is published by *Srbijagas*, namely technical, booked and available capacities for all points of the system. Information is missing on the *ex-ante* and *ex-post* supply and demand situation, balancing measures and revenues, nominations and re-nominations in both directions and actual physical flows.

The regulatory authority publishes all information on transmission tariffs and methodology for their calculation.

Security of supply

Serbia complies with the provisions on security of supply required by Directives 2009/73/EC and 2004/67/EC. However, it did not develop any secondary act as required by law which would implement the primary legislation in practice. Serbia failed to submit the 2017 Security of Supply Statement.

Eligibility and switching

The eligibility right to freely choose a supplier is guaranteed to all customers. Supplier switching rules are adopted by the regulatory authority.

The market share of the largest company in the retail market, calculated as percentage of total gas sales in the country, reached 79% in 2016. The percentage of non-household customers having changed their supplier was 0,17% in 2016, or 3,7 % of total sales. In total, 923 non-household customers were supplied at non-regulated prices. All households are still supplied by their incumbents at regulated prices.



3rd Package transposition

The Natural Gas Market Law transposed the majority of 3rd Package provisions.

TSO unbundling

The Natural Gas Market Law provides the legal background for TSO unbundling. To date, *Ukrtransgaz*, a transmission and storage system operator, is still only legally unbundled from *Naftogaz*. In 2016, the Government of Ukraine adopted a Plan on Unbundling of *Naftogaz*. The plan foresees the creation of two new entities to operate the transmission and storage systems – *Main Gas Pipeline of Ukraine* and *Underground Gas Storage Facilities of Ukraine*, both wholly owned by the state and managed by the Ministry of Energy and Coal Industry. Gas production and supply activities of *Naftogaz* would be continued to be controlled by the Ministry of Economic Development and Trade in order to fulfil the separation requirements under the ownership unbundling model. *In praxis*, the implementation of the unbundling plan is in a significant delay.

Transmission tariffs

An entry-exit transmission tariff methodology is implemented and the tariffs are available for the interconnection points with transmission systems of the neighbouring EU Member States and Moldova, for system users directly connected to the transmission network as well as for the exits to the distribution networks. The tariffs are still not implemented at the entry points from Russia. Utilisation of entry/exit points from production fields is currently charged at a zero rate.

Capacity allocation and congestion management

The transmission network code of *Ukrtransgaz* provides for both long- and short-term capacity allocation. In 2016, all capacities at interconnection points and for the national market were booked on a monthly basis. According to the transmission network code, the auctioning of capacity is only foreseen at interconnection points when the overall amount of requested capacity exceeds the available capacity on a particular interconnection point. In February 2016, an auction for yearly capacity was organized, but without the expected outcome. No yearly capacity was allocated. Transparency of the capacity allocation process is ensured by publishing the relevant rules, allocation calendar and daily available capacities.

In case of contractual congestion, *Ukrtransgaz* offers unused capacity on the primary market on a day-ahead and interruptible basis. On the other side, gas distribution system operators, gas producers, direct consumers and gas storage

facility operators do not have the right to re-sell their booked but unused capacities.

Balancing and liquidity

The partial implementation of balancing rules, as stipulated in the transmission network code of *Ukrtransgaz*, did not contribute to increasing liquidity in the wholesale market. For physically balancing the network, *Ukrtransgaz* uses its own storage and linepack resources. Commercial balancing of network users is done only monthly, including a 15% tolerance level. This practically means that network users do not have a need to participate in any trading platform in order to obtain gas for balancing reasons. In addition to this, financial guarantees required for the purpose of balancing are disproportional.

Daily balancing obligations are imposed on interconnection network users only. However, they are not applied in practice. Amendments to the transmission network code regarding balancing are under discussion.

Finally, the Storage Code allows for reserving an undefined part of the storages for network balancing purposes. This is not a market-based solution and will create an obstacle to balancing market development.

According to *Ukrtransgaz*, 32 importers booked entry capacity to Ukraine in 2016. In general, *Naftogaz* and the other 31 importers purchased gas at the border with neighbouring EU Member States⁸ and sold it further in the Ukrainian market.

The wholesale gas market of Ukraine has its regulated and non-regulated parts, with around 250 traders active in 2016. There is no license requirement for participation in the wholesale market. Trading is mainly done directly, by using short-term bilateral contracts. In January 2016, the Ukrainian virtual trading point (VTP) launched its operation. According to *Ukrtransgaz*, there were 320 companies active on the VTP in 2016, performing 2.676 transactions and trading volumes added up to more than 20.169 mcm of gas. In 2016, only monthly products on an OTC basis were traded. Access to the VTP is regulated by the transmission network code: access to the Ukrainian gas transmission network at the same time grants access to the VTP.

Further to the VTP, there are two commodity exchanges in Ukraine where trade of natural gas is possible, namely *CE UEEX* and *UGX*. However, there is no publicly available information on trades performed in 2016 at these market places. It is assumed that the liquidity of these exchanges is very low.

⁸ From 15 European traders, none of them individually accounted for more than 30% of gas import quantities.



Transparency

The majority of the requirements of Directive 2009/73/EC and Regulation (EC) 715/2009 related to transparency of the transmission system operators have been transposed and implemented. Published information covers some of the technical information necessary for network users to gain effective access to the system for all relevant points, namely: technical capacity for flows in both directions, contracted firm capacity⁹, actual physical flows as well as planned and actual interruptions of both interruptible and firm capacity. Information is still missing on balancing measures and revenues, *ex-ante* and *ex-post* supply and demand situations, nominations and re-nominations as well as available firm and interruptible capacities.

Information on actual physical flows at interconnection points is regularly published on the ENTSOG Transparency Platform.

The regulatory authority publishes all information on transmission tariffs and the underlying methodologies.

Security of supply

The primary legislation is compliant with the Energy Community security of supply acquis and transposes certain core elements in line with Regulation (EU) 994/2010. The Government and the Ministry of Energy and Coal Industry adopted the relevant secondary security of supply acts, and submitted the annual Security of Supply Statement.

Eligibility and switching

All customers have the right to freely choose and switch their supplier.

There were around 200 active retail suppliers in 2016, with the biggest supplier reaching a market share of 32%. All households are still supplied by their incumbents at regulated prices. Furthermore, district heating companies and religious organizations are also supplied at regulated prices.

The Law on Natural Gas Market foresees full market opening and a gradual phase out of gas price regulation. For the purpose of general economic interest and protection of vulnerable customers in specific cases and for a defined period of time, the law allows the imposition of special obligations. The currently applicable Public Service Decree is not compliant with the principles of non-discrimination, transparency and proportionality of the gas acquis. This measure effectively prevents the participation of new wholesale suppliers (other than *Naftogaz*) and independent retail suppliers (other than incumbent suppliers legally unbundled from DSOs at relevant supply areas) under the PSO scheme, which is breaching the Gas Directive.

As part of the Public Service Decree, the Government raised the gas prices in two phases aiming at achieving their market level. However, market prices are yet to be achieved.

⁹ Only on interconnection points from European Union Member States.



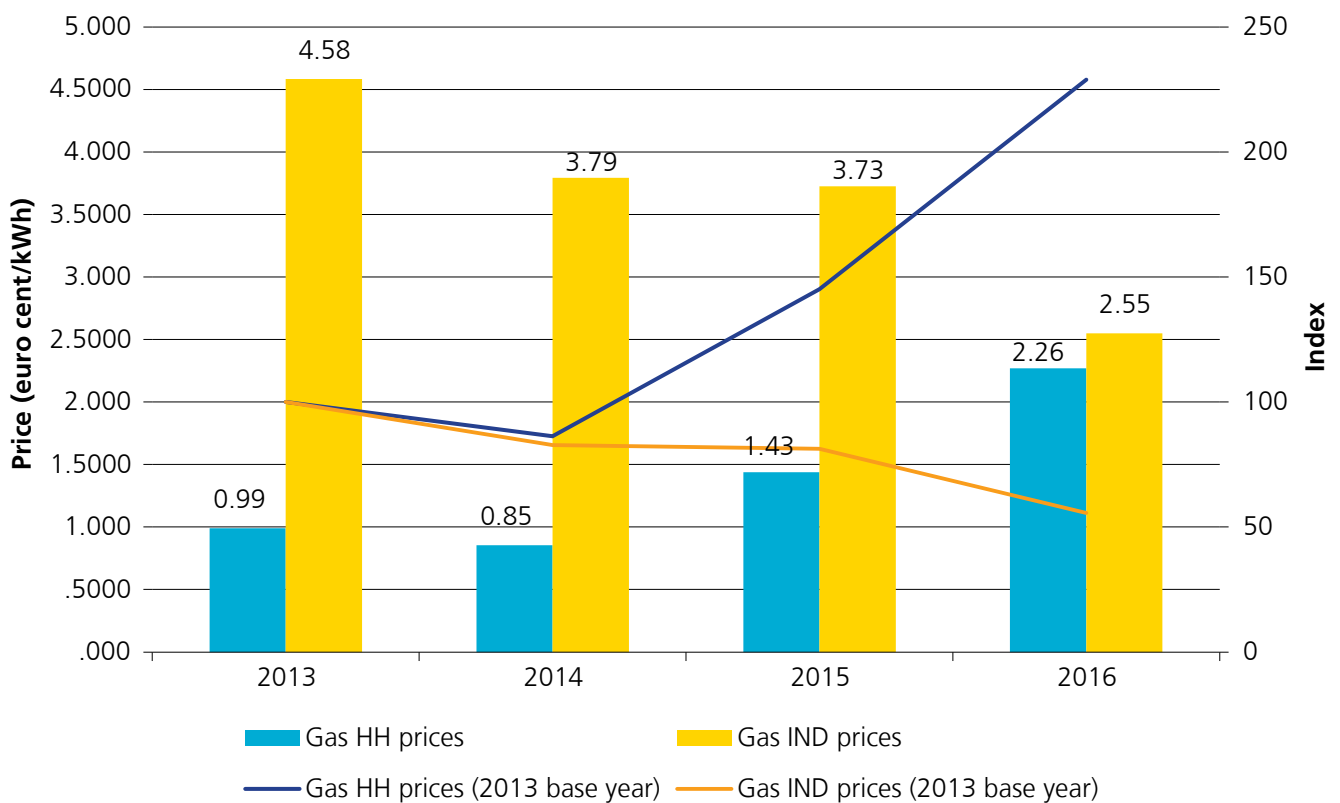
Retail gas prices in 2016¹⁰

The increase in the average household gas price in the Contracting Parties in the period between 2013 and 2016 was substantial - 128%. However, this increase was driven solely by Ukraine¹¹, while gas household prices in all other Contracting Parties decreased. On the other side, industrial gas prices decreased in all Contracting Parties - the weighted average industrial gas price was 1.8 times lower in 2016 than in 2013 (Figure 2), reaching the level of industrial gas prices in the EU-28: 2.56 euro cents/kWh.

In Ukraine, household gas prices were increasing from 2014 onwards due to the Government's public service decree, which implements the stepwise increase of household gas prices as agreed with the IMF.

Differences in both household and industrial gas prices at the national level across the Contracting Parties may be observed in Figures 3 and 4 below. The discrepancies in the household segment mainly originate from the different levels of cross-subsidization applied between industry and households in the process of regulating end-user gas prices (in 2016, household gas prices were regulated in all Contracting Parties except former Yugoslav Republic of Macedonia, while industrial prices were regulated in Bosnia and Herzegovina, Moldova, Georgia and, partially, Serbia¹²). However, the intensity of cross-subsidization has been decreasing over the observed period, especially in Ukraine, where the household gas price in 2016 (2.23 euro cent/kWh) was almost 3 times higher than in 2013 (0.86 euro cent/kWh) and the industrial price decreased almost two times (from 4.63 euro cent/kWh in 2013 to 2.45 euro cent/kWh in 2016).

Figure 2 Gas POTP trends for household and industry consumers in the EnC CPs- 2013-2016 (euro cent/kWh and index change, 2013=100)



source: Eurostat (14 June 2017), Energy Community national regulatory authorities and calculations by the Energy Community Secretariat

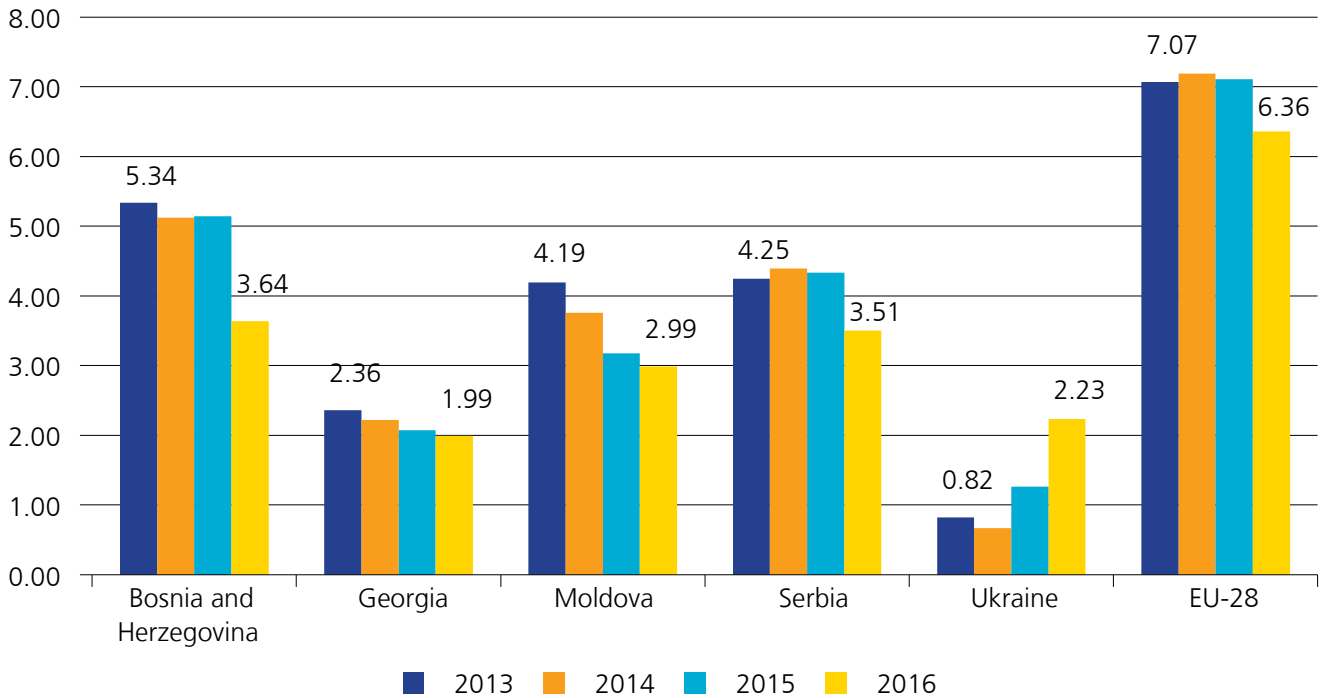
Note: The figure is based on bi-annual data provided by Eurostat for consumption bands D2: 20-200 GJ (household gas consumption) and I5: 1,000,000-4,000,000 GJ (industrial gas consumption) as well as on the annual data provided by NRAs of Moldova, Georgia and Ukraine.

¹⁰ The information in this chapter was collected and summarized by the Energy Community Secretariat for the purpose of the ACER Market Monitoring Report 2016 and covers all Energy Community Contracting Parties with operational gas markets: Bosnia and Herzegovina, former Yugoslav Republic of Macedonia, Georgia, Moldova, Serbia and Ukraine.

¹¹ The pondering effect of gas volume consumed in Ukraine is even more substantial than in the case of electricity prices: while Ukraine consumed around 113,000GWh of gas, all other EnC CP consumed in total close to 14,000GWh.

¹² Only for small non-household customers, consuming less than 3,600 GJ per year.

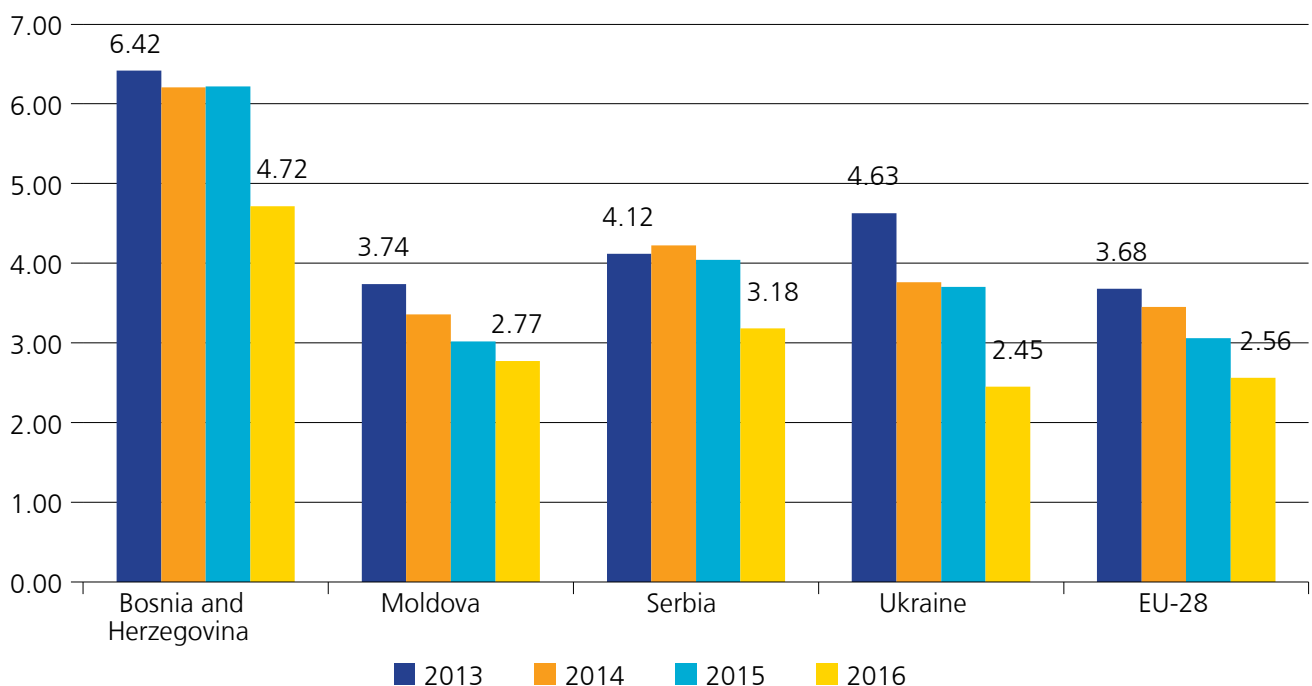
Figure 3 Gas POTP trends for households in the EnC CPs -2013-2016, in comparison to EU-28 average level (euro cent/kWh)



source: Eurostat (14 June 2017), calculations by Energy Community national regulatory authorities and the Energy Community Secretariat

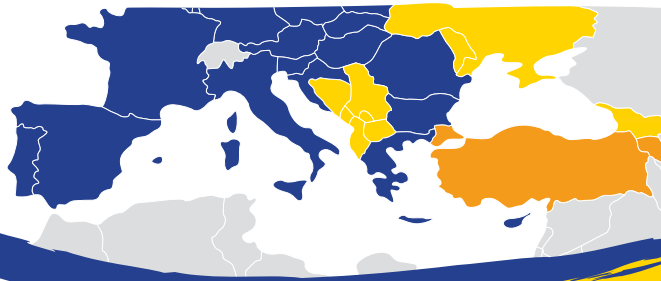
Note: The figure is based on bi-annual data provided by Eurostat for consumption bands D2: 20-200 GJ (household gas consumption) and on the annual data provided by NRAs of Moldova, Georgia and Ukraine. Data for FYR of Macedonia is not available due to a very limited number of household customers in the country, which are all supplied at non-regulated prices not known to the NRA.

Figure 4 Gas POTP trends for industrial consumers in the EnC CPs-2013-2016, in comparison to EU-28 average level (euro cent/kWh)



source: Eurostat (14 June 2017), calculations by Energy Community national regulatory authorities and the Energy Community Secretariat

Note: The figure is based on bi-annual data provided by Eurostat for consumption bands I5: 1,000,000-4,000,000 GJ (industrial gas consumption) and on the annual data provided by NRAs of Moldova and Ukraine. Industry gas prices for FYR of Macedonia are confidential for consumption band I5. Information on industry prices in Georgia is not available to the NRA.



Regional market integration

Network codes and guidelines

Unlike Directive 2009/73/EC and Regulation (EC) 715/2009, network codes and guidelines are not yet part of Energy Community law. Continuous alignment of the Energy Community acquis *communautaire* ('acquis') with legislative developments on EU level is, however, a pre-condition for market integration and cross-border trade beyond the mere borders of the Contracting Parties. This is specifically important for the gas sector, where the Contracting Parties' transmission networks are mainly interconnected with the EU neighbours at the end of the main transit routes and only a small liquidity boost can be expected from integrating Contracting Parties' markets only, especially given their small size and low level of development. The Energy Community Treaty, therefore, foresees the possibility to update the acquis, in line with the evolution of EU law. At the same time, institutional and market related particularities of the Contracting Parties need to be adequately reflected. To be part of Energy Community law, network codes and guidelines have to be adopted by the Permanent High Level Group of the Energy Community. As regulations, EU gas network codes and guidelines will not be directly applicable in the Contracting Parties but require transposition into national legislation.

The Secretariat made the adoption of the gas network codes and guidelines part of its gas strategy summarized in the *Energy Community Gas Action 2020*. Starting with a first set of documents adopted on EU level, namely Commission Regulation 703/2015/EU ('interoperability network code') and Commission Decision (EU) 2015/715/EU ('congestion management guideline'), the Secretariat launched discussions with stakeholders in May 2016 on the incorporation of these rules. This process resulted in mutually agreed adaptations for the Energy Community. The original timeline foreseen in the *Gas Action 2020* for their adoption (1st and 2nd quarter of 2017) had to be postponed due to European Commission's procedures. A proposal by the Commission is now expected for the end of 2017.

On the positive side, it is to be highlighted that the Secretariat received the commitment of almost all regulators from EU Member States neighbouring a Contracting Party to apply the gas network codes and guidelines on their common interconnection points, albeit only on a voluntary basis. Despite the lack of legal certainty, this is an important signal for market integration. For full integration of the pan-European gas market, the Energy Community Treaty will have to be amended.

Interconnection agreements

The transmission networks of the Contracting Parties are better connected with the transmission networks of neighbouring EU Member States than between each other. Out of the total 22 interconnection points, only four are between Contracting Parties, namely three interconnection points between Ukraine and Moldova and one interconnection point between Serbia and Bosnia and Herzegovina. The other 18 interconnection points are between EU Member States and Contracting Parties.

While Serbia, Bosnia and Herzegovina and former Yugoslav Republic of Macedonia are situated at the end of supply routes, Moldova and Ukraine are on the main transit routes bringing Russian gas to Europe and Turkey. These particularities are reflected in the type and status of interconnection agreements in place.

Ukrtransgaz signed interconnection agreements, or started negotiations, with all adjacent transmission system operators, with a view to have all agreements in line with the EU network code on interoperability and data exchange¹³. *Ukrtransgaz* signed interconnection agreements with *Gaz-System* in 2014 and with *Eurostream* in 2015 for the newly established interconnection points Hermanowice and Budince, while negotiations with Poland are still ongoing regarding the old interconnection point Drozdovice, for which an interconnection agreement is in place since 2006. *Ukrtransgaz* and *FGSZ* signed an interconnection agreement for both interconnection points at the Hungary-Ukraine border in 2015, but the agreement is still not fully operational. The interconnection agreements on the main transit route to Central Europe, between Ukraine and Slovakia, have not been signed due to unsolved issues related to actual capacity booking partners and shipper codes. A similar problem exists on the Trans-Balkan route. The interconnection agreements for Orlovka – Isaccea points are pending.

Ukrtransgaz and *Transgaz* have just closed a public consultation on a draft interconnection agreement for the fourth interconnection point between Ukraine and Romania, Tekovo – Mediesu Aurit. A public consultation was also launched for the interconnection agreement between Ukraine and Moldova. In the course of this consultation, *Gazprom* challenged the right and need to introduce EU rules at Contracting Parties' interconnection points under long-term transit contracts. For interconnection points between EU Member States and Contracting Parties, namely between Moldova and Romania and Bulgaria and former Yugoslav Republic of Macedonia, the responsible trans-

¹³ Commission Regulation (EU) 2015/703 of 30 April 2015 establishing a network code on interoperability and data exchange rules, OJ L113/13, 01.05.2015.

mission system operators concluded technical agreements. However, the agreements are far from being compliant with the requirements of the network code on interoperability and data exchange. *Srbijagas* and *FGSZ* held negotiations on adjustments to their technical agreement, a part of transit and supply contracts. Subsequently, they signed an operational agreement in July 2017. For the interconnection point between Serbia and Bosnia and Herzegovina, negotiations on an interconnection agreement have not started yet.

Figure 5 Interconnection points between transmissions networks of Energy Community Contracting Parties and European Union Member States



source: ENTSOG map, compiled by the Energy Community Secretariat

Capacity booking platforms

The implementation of harmonized capacity allocation rules in the Energy Community region has been identified as an indispensable part of market reforms in line with the *Energy Community Gas Action 2020*. This would require the joint offer of bundled capacity products by adjacent transmission system operators on capacity booking platforms. While transmission system operators of the EU Member States have already developed the relevant procedures for implementing the network code on capacity allocation, the transmission system operators of the Contracting Parties have not started this activity yet. The Secretariat launched coordination meetings to promote knowledge sharing and to create platforms for further communication and discussion on the implementation of this network code.

In July 2017, the first workshop of that kind was organized with the Polish transmission system operator *Gaz-System*. For end September 2017, a similar workshop with *FGSZ* of Hungary is scheduled.

Harmonization of licenses

The Third Energy Package calls for the creation of pan-European gas and electricity markets and access for customers to their supplier of choice. Whereas the former is indispensably linked to the creation of liquid wholesale markets, the latter requires access of new suppliers to end-customer markets. In both cases, unnecessary administrative and regulatory requirements create undue barriers.

Licenses have been constantly criticised as a hampering factor for the creation of liquid trade, in particular when complemented by high administrative requirements or double taxation. Even the diversity of different national licensing requirements and procedures can result in high costs for trade. At the same time, deregulation of the current licensing regime may depend on harmonization of some of the aspects normally put forward as justifications for licensing regulation, such as VAT, enforcement, customer protection, etc.

In the light of the above, the Secretariat proposed a concept for harmonisation of licensing regimes in the Contracting Parties and neighbouring EU Member States (as a measure under Title III of the Energy Community Treaty) that aims at minimizing the administrative burden for new market entrants on both wholesale and retail supply level, while maintaining the necessary regulatory supervision and avoiding the establishment of new obligations in countries where a license is currently not required.

Implementation of the gas interconnector Serbia (Nis – Dimitrovgrad) – Bulgaria (Sofia – Dubnica) progress update

The gas interconnector, which aims to create a connection between the existing gas transmission systems of Serbia and Bulgaria with a capacity of 39,44 GWh/d, has been promoted by the European Commission and the Energy Community Secretariat for more than seven years. A number of high-level political agreements between the two countries' energy ministers have been signed (in 2012, 2015 and 2017).

Interconnector investment studies on both sides of the border were funded by EU grants (IPA multi-beneficiary budget for the Serbian connection and the JESSICA programme for the Bulgarian connection). The feasibility study, spatial planning, design and permitting either have been completed or are in progress. Nevertheless, the project is still at an early

Regional Overview



stage of development, and the final investment decision is pending. The European Commission has agreed in principle to partial grant financing for a significant share of the eligible costs of the works on Serbian territory, from the national IPA budget, though the grant agreement is yet to be signed. Bulgaria will be using its EU structural and cohesion funds for the works. According to the aligned project implementation

schedule, the interconnector is now expected to be put in operation in May 2022.

Nevertheless, the advancement of the project has witnessed many “stop and go” phases. It has become clear that its realization depends on the political will of the participating countries. In this respect, the CESEC process will be decisive.

Figure 6 Gas interconnector Serbia (Nis – Dimitrovgrad) – Bulgaria (Sofia – Dubnica)



source: ENTSOG map, compiled by the Energy Community Secretariat

