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# COMMISSION STAFF WORKING DOCUMENT

# **Report on the findings of the South-East-European Focus Group**

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the short term resilience of the European gas system

Preparedness for a possible disruption of supplies from the East during the fall and winter of 2014/2015

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#### 1. Work of the South-East European Focus Group

The South-East-European (SEE) focus group was defined, for the purposes of this stress test exercise, as consisting of Greece, Bulgaria, Romania, Hungary and Croatia. These Member States were selected particularly for their mutual dependency and subsequent reliance on one or few Member States for deliveries of gas in case of a disruption either of the Ukrainian route or of Russian supplies in general. The definition of this particular group served primarily the purpose of carrying out the stress test exercise in an efficient and coordinated manner, the key objective being that Member States sharing a common border (and interconnection) have regard to each-others' plans and adopt as cooperative an approach as possible. Logically, given the interdependencies in the broader Central and Eastern European region, the grouping of Member States may be manifold, both ad hoc and more sustained. Constructive and open coordination as part of alternative groupings, such as the Visegrad 4 (V4), TEN-E regional group in Central and South Eastern Europe or the broader Gas Regional Initiative South-South-East, may all contribute to the broader supply security of the region.

The Commission has organized several dedicated meetings and telephone conferences for the Member States of this focus group in the course of the summer to discuss the preparation of the national reports with the particular aim of ensuring coordination amongst them throughout the process. Overall, there was a good level of engagement and several national reports have been shared among Member States. Nevertheless, a joint report or more collaborative effort, such as the one carried out in the Baltic Member States and Finland, was not considered. The most intensive coordination has taken place between Greece and Bulgaria. Consequently, having regard to the latter, this analysis will focus on the respective national reports, pointing to any coordination undertaken or lack thereof.

### 2. Description of the system

Natural gas plays a key role in the energy mix of all the Member States in the focus group.

	Bulgaria	Croatia	Greece	Hungary
Natural gas consumption (bcm)	2,5	2,8	3,8	9,3
Share of natural gas of gross inland energy consumption (%)	14%	30%	13%	35%

Table 1 – Natural gas consumption and share of energy consumption per Member State

Source: Eurogas, European Commission EU energy in figures statistical pocketbook 2014

In addition to exploiting domestic production<sup>1</sup> natural gas networks in the SEE Focus Group have been, with the exception of Croatia, designed largely with a view to receiving supplies

<sup>&</sup>lt;sup>1</sup> Domestic production is significant in Romania and has a smaller share in Croatia and Hungary. There is no appreciable domestic production in Bulgaria or Greece.

from Russia via Ukraine. There have in the past years been some important additions to these networks such as the interconnector between Hungary and Austria, the Greek LNG terminal and some interconnections and reverse-flow projects between these Member States<sup>2</sup>. However, overall there is still a lack of robust bi-directional interconnection – including due to internal network-related constraints – between the networks overall and with other Member States. Therefore scope for gas flow optimization in the case of a supply cut through Ukraine is still restricted within this region. In addition, as mentioned in the Communication, several such connecting infrastructure projects launched after the 2009 gas supply crisis, including with EU funding from the European Energy Program for Recovery, have still not been commissioned which contributes to the sustained high exposure of these systems to a supply shock from the East.

Storage capacity varies in the focus group Member States with Hungary having the largest at over 6 bcm, Romania at nearly 3 bcm and smaller storages in Bulgaria and Croatia, which are also significantly smaller markets. There is no underground gas storage in Greece. As of early October, storage filling levels in Bulgaria and Croatia were above 80% and in Hungary above 65%<sup>3</sup>. Nevertheless, Hungary has one of the highest storage fill to demand ratios among Member States. No data is being published by Romanian storage operator Romgaz on the storage transparency platform.

In case of a 6-month Russian gas supply disruption modelled by ENTSOG, missing gas (before measures) by February in the 5 Member States would be as shown in Table 1. In relative terms Bulgaria is most exposed although total shortfalls are higher in Hungary and Romania due to larger markets. Croatia and Greece experience smaller shortfalls with the latter being the only Member State in the focus group whose position deteriorates in the "cooperative" scenario due to a relative burden sharing with Bulgaria whose position would otherwise be more precarious.

<sup>&</sup>lt;sup>2</sup> These are the interconnectors between Hungary and Croatia as well as the one between Hungary and Romania and the reverse flow towards Austria in Hungary. The latter two projects have been co-financed through the European Energy Program for Recovery (Regulation 1233/2010).

<sup>&</sup>lt;sup>3</sup> Source: Gas Storage Europe AGSI transparency platform.

	Bulgaria	Croatia	Greece	Hungary	Romania
Cooperative averge	38%	0%	16%	26%	37%
Non-cooperative average	61%	0%	0%	31%	42%
Cooperative cold spell	41%	5%	32%	26%	31%
Non-cooperative cold spell	66%	12%	18%	35%	31%

Table 2 – Missing gas (%) in February ( $6^{th}$  month) according to ENTSOG modelling of a 6-month Russian gas flow disruption in an average February and cold spell February

Source: ENTSOG

#### 3. Assessment of the reports

#### **3.1.** Cross-border measures

The analysis of the national reports has shown important elements which can be used to improve the supply situation in the short term as well. As a general note, these Member States are significantly less vulnerable if there is cooperation among themselves as well as with other – particularly neighbouring – Member States. This holds true particularly as all these Member States have limited direct import infrastructure for other gas than that coming from Russia (via Ukraine)<sup>4</sup> and all consider themselves as net "receivers" of gas volumes. It is therefore crucial that all measures are taken domestically to buffer the effects of a supply cut and that all measures are taken across borders to ensure that maximum gas quantities can enter from Member States with access to alternative supplies and correspondingly those supplies can reach customers in the entire region.

In its report Greece is only relying on deliveries from Turkey to a very limited extent which is prudent though the potential for or conditions of continued deliveries could be explored. It does however set out a vital role for (spot) LNG under any supply disruption scenario. On the basis of analysis of LNG market dynamics provided by the International Energy Agency to the Commission as well as discussions with market experts there appears to be sufficient flexibility in the market to procure such cargoes. It is clear however that if such purchases are not linked to an option or a term contract, the price can be expected to be very high, possibly even double the market price of gas today. In addition, it also needs to be taken into account that once such a transaction is made, it can take up to a week for a cargo to arrive.

<sup>&</sup>lt;sup>4</sup> Meaning that only Greece has direct access to an import gas source via its LNG terminal.

The reverse flows at the interconnection between Greece and Bulgaria remain quite restricted but could in principle be used to a level of 3 mcm/day<sup>5</sup> which would allow LNG to flow into Bulgaria.<sup>6</sup> To this end, in coordination with Bulgaria, which is in general long on electricity, a scheme has been discussed by which Greece could effectively exchange around 3 mcm/day of gas for its equivalent in electricity produced, thus helping to keep both sectors stable in the two Member States. This example underlines the strong connection between the two sectors and that the most effective solution to respond to a possible gas supply disruption is to maximize cross-border capacities both in electricity and gas. In addition, as Bulgaria points out in its report, the existence of a regional intraday electricity market can also help alleviate the effects of such a disruption. All efforts should therefore be made by in particular the national regulator and ministry for the establishment of such an arrangement.

Bulgaria also sets out in its report that for such an exchange-based scheme to function effectively in the coming winter, it needs the additional electricity generation capacity of the Varna power plant which is to be closed down on 31 December 2014 in line with EU environmental rules<sup>7</sup>. While the Commission understands the position of Bulgaria in the matter, granting such temporary derogations may have far-reaching implications in clashing environmental and energy legislation. Nevertheless, as a last resort the Commission will consider granting a temporary exemption to alleviate a possible supply crisis.

The situation of the interconnector between Bulgaria and Romania has also been assessed. This infrastructure that receives EU financial support under the European Energy Program for Recovery was initially foreseen to be operational by the end of 2013 but has not been finalized yet. Information received from both Member States certainly makes it clear that urgent action is required in order to ensure that the outstanding issues of this project are resolved. However, given the apparent complications of the project, it is unlikely to be finalized for the coming winter. Nevertheless, clear political commitment from both Member States is necessary to overcome technical and organizational challenges and finalize the project in the shortest timeframe. In addition, the low pressure in the Romanian system remains problematic with respect to enabling more substantial cross-border flows to Bulgaria once the pipeline is in place but also to and from Hungary. This strongly underlines the need for all regional strategic infrastructure (domestic and cross-border) to be put in place expediently.

<sup>&</sup>lt;sup>5</sup> 3 mcm/day is according to ENTSOG data, of which 1 mcm/day is firm capacity while another 2 mcm/day is interruptible capacity. Bulgaria sets out in its national report that the capacity could even be 4.2-6 mcm/day depending on pressure conditions.

<sup>&</sup>lt;sup>6</sup> The Interconnector Greece-Bulgaria also receives EU financial support under the European Energy Program for Recovery. The Interconnector Greece Bulgaria was initially planned for 2014 but is now more likely to be completed by 2016.

<sup>&</sup>lt;sup>7</sup> Unit 6 of the Varna power plant is to be shut down end 2014 on the basis of EU environmental rules. However, although units 1, 2 and 3 have a derogation to continue production until end 2015, due to running hour limitations of 700h/year for each, the plant owner (CEZ Group) is planning to shut down the entire plant by end 2014.

In spite of or perhaps as a result of either missing infrastructure or specific difficulties Member States see as regards gas flows within the region in case of a disruption, only the above-mentioned Bulgarian-Greek exchange scheme was set out in the report. No other assumptions on flows between Member States or towards Energy Community Contracting Parties were made in the national reports of Member States within the region. While it may be due to shortages materializing in these Member States it is certainly a clear signal that Member States currently consider only national approaches to solving a serious supply disruption. This however is also due to a lack of coordination, and while no specific mention was made of export restrictions, no other scheme of mutual optimization was considered or discussed either.

While not mentioned specifically in the report of Bulgaria, the demand in the former Yugoslav Republic of Macedonia is so small<sup>8</sup> that sending minimal necessary volumes to that country from Bulgaria will likely be possible even if Bulgaria experiences a shortfall. This would be an important signal of cooperation that would need to be prepared in advance by way of an agreement between the two countries. Similarly – though no mention was made of this possibility either –, facilitating supplies from Romania to Moldova, which are also low compared to the Romanian consumption, would be equally important from a solidarity point of view, given the lack of alternatives for that country to source its gas.

Looking at further supply possibilities for the region – mentioned tangentially in the Romanian national reports – in a worst case scenario a substantially more complex supply scheme could involve an agreement with Ukraine by which the latter allows flows from e.g. Slovakia to be directed to Romania and possibly Bulgaria through its system.

The role of Hungary in the SEE focus group of Member States is crucial given its interconnections with neighbouring Member States – both those having access to non-Russian gas and those that do not. Currently – in case of a disruption of flows from Ukraine – the supplies to Hungary (and connecting Member States) depend on the availability of flows from the West, through the Hungary-Austria Gas (HAG) pipeline from Austria. According to the information from Austria, the HAG pipeline can flow at maximum capacity<sup>9</sup> as long as there are also flows entering into Austria, allowing that Member State to act as a bridge towards the east. In case flows into Austria would also be reduced as a result of a disruption of all Russian gas flows, it is crucial that proportionate amounts of gas can still be sent across the interconnector into Hungary. In addition, the planned 1 January 2015 commissioning of the Slovak-Hungarian interconnector, co-financed through the European Energy Program for Recovery, will be a crucial milestone in terms of security of supply for the broader region as the large Slovak system allows potentially very substantial deliveries of gas from a westerly

<sup>&</sup>lt;sup>8</sup> It is around 1 mcm/day in February which is 10% of Bulgarian consumption in February.

<sup>&</sup>lt;sup>9</sup> This is equal to 14.4 mcm/day

direction<sup>10</sup>. Recent reports in Hungary of a delay in the testing phase are cause for some concern<sup>11</sup>.

In terms of onwards connections towards the east, Hungary's connection to Romania is about 4 mcm/day. This figure is however further constrained by internal bottlenecks in the Romanian system highlighting the aforementioned general lack of solid gas supply possibilities within these Member States.<sup>12</sup> The Hungarian interconnection to Croatia could also play a role but Croatia can also be supplied through Austria and Slovenia<sup>13</sup>. At the same time, to date neither the Romanian nor the Croatian interconnector with Hungary is bidirectional allowing flows into Hungary.

Hungary's role is also key as it is the sole connection to Serbia (and onwards to Bosnia and Herzegovina). Serbia was receiving gas through this interconnection during the 2009 crisis as well and this would be again crucial in case a supply disruption were to take place. Finally, Hungary has also been supplying gas in physical reverse flow to Ukraine until recently.

## **3.2.** National measures

In spite of the comparatively significant curtailments of non-protected customers that may possibly occur particularly in the event of a full disruption of Russian gas supplies, protected customers in the SEE focus group would – in all likelihood – not need to be curtailed if – alongside effective further national measures – a cooperative approach is adopted by all concerned Member States, within the SEE focus group and those that would be able to supply gas into those Member States, i.e. Austria, Czech Republic, Slovakia, Germany.

Measures being considered by Member States in the focus group relate to increasing flexibility in production (where applicable) and increasing withdrawal rates from the underground storages, but neither measure is considered sufficient to resolve a deeper supply cut. In any event, a faster usage of storages will also have repercussions both on future availability in case of a prolonged crisis as well as physical characteristics as storage withdrawal rates drop as storage volumes decrease.

Other than preliminary projections from a demand response project Greece is putting in place, no Member State has provided an assessment on the amount of price-elastic demand (industrial or power sector) that may be removed from the market as a result of the likely price increases in the case of a serious disruption scenario either through voluntary switching

<sup>&</sup>lt;sup>10</sup> Capacities from the Czech Republic at Lanzhot are at 24 mcm/day and they are at 17 mcm/day from Austria at Baumgarten.

<sup>&</sup>lt;sup>11</sup> Magyar Gáz Tranzit, the operator of the Hungarian side of the interconnector has however stated that said delays will not affect the timely commissioning of the pipeline on 1 January 2015.

<sup>&</sup>lt;sup>12</sup> This means that apparently only about 1 mcm/day can reach e.g. the main demand centre Bucharest.

<sup>&</sup>lt;sup>13</sup> Capacities from Slovenia to Croatia at Rogatec are at 5 mcm/day which can largely complement the national production and storage withdrawal capacity as also modelled by ENTSOG.

measures or production stoppages. In any event it is unlikely that demand response is higher than 10% in any Member State which however is in any event significant.

This consequently leaves compulsory fuel switching as a key measure. All 5 Member States have plans in place for such fuel switches to be carried out and combined heat and power plants and heating units are obliged to keep liquid fuel reserves anywhere from around 5 to 15 days. Some Member States point out in their report that the implementation of these measures – especially on the long term – may require further review in view of e.g. the associated logistics. In any event fuel switching for the district heating sector in particular remains relatively low in at least Romania while it is around half in Hungary.

Consequently, in case of a longer-term disruption, especially of all Russian gas, Member States will have to resort to curtailing non-protected consumers. One way of limiting this is however to implement the cooperative approach flagged earlier and explained in the Communication. To this end all Member States have confirmed in their national reports the specific measures developed in their Emergency Plans<sup>14</sup> as regards the hierarchy of customers and the specific steps to be taken and decision powers to be exercised.

# 4. Recommendations

Member States of the SEE Focus Group remain very exposed to either a Ukrainian transit or a full Russian supply disruption and therefore it is in their interest to take measures to prepare for such an event, irrespective of the likelihood of it materialising. The general recommendations made in the Communication naturally also hold true for the Member States of the SEE Focus Group. In addition the Commission considers that the following specific recommendations are particularly relevant for the Member States in this Group to ensure that ultimately less demand is curtailed in the case of a supply disruption.

# **Common recommendations to all Member States of the Focus Group**

1. **Need for more transparency**. TSOs and national regulatory authorities but also Member States should strive for the highest level of transparency in their actions vis-à-vis stakeholders and the general public. In a situation of heightened political tensions such as the one we are experiencing currently all actions may be interpreted in a political light. It is therefore crucial that such actions are explained to allay concerns and build trust.

Similarly, Member States should be clear as to the measures they will implement in a situation of disruption allowing other Member States and all stakeholders to prepare.

2. **Need to increase bilateral and regional perspective**. Member States in the SEE Focus Group (and beyond in the broader CEE region) need to build trust towards each other to

<sup>&</sup>lt;sup>14</sup> Developed pursuant to Regulation (EU) 994/2010

enable them to benefit from cooperation in the energy sector both in times of crisis and under normal circumstances. Such cooperation should also involve Contracting Parties to the Energy Community. Regional formats may be manifold, can be linked to larger political initiatives and may have as their remit anything from simple exchanges of information to broader joint initiatives. It is crucial that bilateral or broader regional work is structured in a way as to consider the position of the neighbouring Member States when developing e.g. crisis mechanisms but also beyond.

When developing more far-reaching modes of cooperation, such as e.g. intergovernmental agreements setting out cooperation in the sector, it is essential that the political framework is swiftly followed by specific operational elements allowing the agreement to take hold and deliver benefits to both sides.

Specifically in relation to the upcoming winter the early warning team East established recently by ENTSOG, should play a key role both in ascertaining whether a supply crisis is developing and examining the options for TSOs in the region to ensure that system usage is optimal, including from a regional perspective.

- 3. Need to apply EU market rules in consistent and proportionate manner. National as opposed to broader regional security of supply objectives are clearly at the forefront of considerations in Member States in the SEE Focus Group. This may indeed not be much different from those of many other Member States. It is crucial that Member States do not interpret EU rules in a narrow sense in implementing public service obligations e.g. as regards capacity reservations at interconnectors. Furthermore, the consistent application of network codes and guidelines such as those related to congestion management, capacity allocation and balancing are essential to allow the efficient functioning of cross-border trading by market players.
- 4. Need to finish projects on time. Unfortunately too many projects and initiatives have been left suspended or bogged down by problems in the SEE region leading to an overall level of strategic preparedness for a possible shortfall in the Ukrainian transit or Russian supplies of natural gas that would need to be improved. Specifically Member States should take necessary measures to assess the points of contention in joint projects and, if deemed appropriate, invite an independent third party to resolve differences.
- 5. Need to ensure that fuel switching can be carried out. Fuel switching, which has been assessed by Member States mostly in the context of obligatory measures as opposed to price-driven ones, is very important to further reduce exposure to natural gas in most Member States. At the same time, measures in place foresee relatively short liquid fuel stocking obligations. While this may be in accordance with the plans developed under Regulation 994/2010, consideration should be given to the impacts of a more prolonged supply shock, including logistics and commercial implications.

### Greece

- 1. Electricity-gas exchange Memorandum of Understanding with Bulgaria. Greece should launch expedited discussions with Bulgaria (starting with political level followed by operational level of 4 (electricity and gas) TSOs) to develop a Memorandum of Understanding by 31 December 2014 ensuring unhindered electricity supplies to Greece and in return reverse flow gas supplies to Bulgaria in case of a serious gas supply disruption. Key to this plan is a **balance of interests** in that electricity volumes to Greece should be roughly equivalent to gas necessary to produce that electricity in the gas-fired power plants which in turn is sent to Bulgaria.
- 2. Contingency plan with industry, CHPs and heating on switching: Statutory stock obligations for alternative fuel of light or heavy fuel oil amount to 1 to 10 days. A plan should be developed as soon as possible with industry players to ensure logistical, commercial and regulatory arrangements are in place to ensure fuel oil deliveries to plants under normal market conditions and alternatively define the circumstances pursuant to which strategic oil stocks may be tapped for the purposes of replacement fuel for power/heat generation.
- 3. Evaluate the economics of additional LNG purchases, replacement fuel oil, extra electricity imports and the demand response plan just enacted and on that basis **develop the most economic security of supply contingency plan**.

### **Bulgaria**

- 1. Electricity-gas exchange emergency Memorandum of Understanding with Greece. Bulgaria should launch expedited discussions with Greece (starting with political level followed by operational level of 4 (electricity and gas) TSOs) to develop a Memorandum of Understanding by 31 December 2014 ensuring unhindered electricity supplies to Greece and in return unhindered gas supplies to Bulgaria in case of a serious gas supply disruption. Key to this plan is a **balance of interests** in that electricity volumes to Greece is roughly equivalent to gas necessary to produce that electricity in the gas-fired power plants.
- 2. Contingency plan with industry, CHPs and heating on switching: Statutory stock obligations for alternative fuel oil amount to 5 days. A plan should be developed as soon as possible with industry players to ensure logistical, commercial and regulatory arrangements are in place to ensure fuel oil deliveries to plants under normal market conditions and alternatively define the circumstances pursuant to which strategic oil stocks may be tapped for the purposes of replacement fuel for power/heat generation.
- 3. Take all necessary measures to overcome challenges of finalizing the Romania-Bulgaria interconnector in the next months. It is the understanding of the Commission that delays of this project have been two-fold: technical issues related to the construction

of the Danube crossing and problems concerning the pressure difference between the Romanian and Bulgarian systems.

- 4. **Consider similar electricity-gas exchange emergency agreement with Turkey**. Curtailing electricity exports to non-EU partners such as Turkey – even in a security of supply emergency – would send a bad political signal. At the same time it could be investigated whether a commitment to continue exports even under emergency conditions could not be replicated on the Turkish side by reverse flow of gas, the technical possibilities of which appear to be possible and are being investigated.
- 5. Commitment to continue to allow for the operation of the interconnector towards the former Yugoslav Republic of Macedonia even in the case of a supply shortfall. Bulgaria should make a clear commitment on the basis of solidarity not to cut off very minor volumes to the former Yugoslav Republic of Macedonia. It has not done so in its national report, so it is important that this is made clear in bilateral discussions.
- 6. Need for more transparency and implementation of internal market rules. Bulgaria should work together with its regional partners in both electricity and gas to start developing transparent, integrated/regional market places based on EU internal market rules. As it set out in its national report specifically on the need for intraday regional electricity markets, efforts should be made in an expedited manner to promote such markets developing. The logic and merits of such regional/liquid markets are the same for electricity and gas. Correspondingly, it must be in Bulgaria's interest to also promote liquid regional gas markets.
- 7. As a last resort, the Commission to consider short term derogation from the Large Combustion Plant Directive<sup>15</sup> to Varna coal-fired power plant (unit 6) allowing it and units 1,2,3 to stay online at least as cold reserve during the coming winter.

## <u>Romania</u>

- 1. Take all necessary measures to overcome challenges of finalizing the Romania-Bulgaria interconnector in the coming months. It is the understanding of the Commission that delays of this project have been two-fold: technical issues related to the construction of the Danube crossing and problems concerning the pressure difference between the Romanian and Bulgarian systems. As has also become clear from the Romanian national report, which builds on an autarchic perspective but experiences significant shortfalls, interconnections are crucial in increasing security of supply.
- 2. Romania should by 31 December 2014 work out a clear definition of protected customers in line with provisions of the Security of Gas Supply Regulation. It is important to delineate this group both from the point of view of Romania's obligations

<sup>&</sup>lt;sup>15</sup> Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

under the Security of Gas Supply Regulation as well as to allow less sensitive groups of customers to react to price signals in case of serious shortages. In view of the significant potential shortfall during the winter months it is crucial to delineate precisely which – limited – customer groups the Romanian authorities want to protect in a particular manner.

- 3. **Investigate (as starters) short-term feasibility of making full use of Hungarian-Romanian interconnector**, potentially bridging apparent limitations within the Romanian system to allow flows reaching capacity of the interconnector. At the same time take necessary measures to allow higher flows towards Hungary.
- 4. Investigate possibility of supplying Moldova via existing pipeline network in case of lack of flows from Ukraine. Romania should undertake to ensure supplies reach Moldova in the case of a gas supply emergency– on the basis of solidarity –. It has not done so in its national report so it important that this is made clear in bilateral discussions.
- 5. Urgent publication of storage level data by Romgaz. EU-level transparency data on storages has proven a very valuable tool to monitor and debate EU security of supply policy. So far the Romanian storage system operator in not a member of Gas Storage Europe (GSE) nor is it providing data on gas storage volumes to GSE. Romania is thus the only Member State with underground storage capacity which is not reporting any data for which there appear to be no reasonable explanation.

## **Hungary**

- Commitment to resolve outstanding testing-related issues on Slovak-Hungarian interconnector ensuring its commissioning by 1 January 2015. The Slovak-Hungarian interconnector is in the interest of Hungary as well as the Member States and Energy Community Contracting Parties linked to Hungary (Serbia and Bosnia and Herzegovina). Transparency surrounding the commissioning of this pipeline needs to increase greatly for the benefit of the Hungarian gas sector and the credibility of Hungarian energy policy.
- 2. Hungary, as a result of its relatively well-connected gas network, has an important role to play in terms of receiving gas from or via Central European Member States and in supplying Member States and Energy Community Contracting Parties to the south and east. On that basis it should sign agreements with bordering countries related to security of supply emergencies, in order to maximise the amounts of gas it can receive from well supplied neighbours on the one hand, and ship onwards to neighbours facing shortfalls, on the other.
  - Need to implement and operationalize Hungarian-Croatian Intergovernmental Agreement on security of supply. While the initiative is a commendable one, it appears that the parties are have yet to take specific action to ensure material mutual benefits from such an agreement. Specifically apparently even without compression Croatia would be able to supply 1 mcm/day using the

Hungarian compressor station and therefore an agreement should be found to implement this scheme and with it allow reverse flows.

- Continue discussions with Austria to agree on the specific circumstances of using the Hungary-Austria interconnector to its full capacity.
- 3. **Increase transparency** (**TSO**, **NRA and Ministry**). Recent interruption of supplies to Ukraine raised questions and complaints relative to its sudden and perceived disproportionate nature. In addition, the role of Gazprom filling the Hungarian storage under special licence-free regime should be clarified.

## **Croatia**

- 1. Need to implement and operationalize Hungarian-Croatian Intergovernmental Agreement on security of supply. While the initiative is a commendable one, it appears that the parties are have yet to take specific action to ensure material mutual benefits from such an agreement. Specifically apparently even without compression Croatia would be able to supply 1 mcm/day using the Hungarian compressor station and therefore an agreement should be found to implement this scheme and with it allow reverse flows.
- 2. Consider reassessing very high share of protected customers to allow for more level playing field with neighbouring Member States.