

CONSULTATION PAPER ON THE REVISION OF

Regulation (EU) No 994/2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC

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INTRODUCTION

On 16 October 2014, the Commission published its Stress Test Communication analysing the effects of a possible partial or complete disruption of gas supplies from Russia¹. One of the key conclusions of the stress test exercise was that increased cooperation and coordination can substantially mitigate the impacts of a disruption. As part of the stress test publication a report on the implementation of the Gas Security of Supply Regulation (EU) No. 994/2010 (hereafter, 'the Regulation') was adopted².

The report demonstrated that the Regulation has already produced important beneficial effects on Europe's gas security of supply situation, both in terms of preparation and mitigation. For instance, Member States are now better prepared to face a supply crisis thanks to the need to prepare and coordinate plans and they are better protected thanks to the need to install bilateral flows on cross-border pipeline connections and meet a determined supply and infrastructure standard.

At the same time, the Report also highlighted areas in which improvements can further bolster Europe's supply security. Revising the Regulation does not mean that implementation of the existing Regulation can be suspended: the Commission will continue to push for better implementation of the provisions by assessing notified plans as well as the effects of

¹ http://ec.europa.eu/energy/stress_tests_en.htm

² http://ec.europa.eu/energy/doc/nuclear/2014_energy stresstests_securityofgassupplyseglulation_report.pdf

implemented measures. Finally, the Report highlighted several sections where improvement of the Regulation itself can lead to more effective management of supply crises. The Report concludes that: *"there is scope to strengthen the EU's preparedness and capacity to respond effectively to gas supply crises further. The Commission services are of the view that the lessons of recent risks to security of supply in the EU, i.e. risks caused by extreme weather conditions such as the prolonged cold spell in 2012 or geopolitical risks having an impact on EU energy security such as the 2014 crisis in Ukraine, should be pulled together in a review of possible improvements to Regulation 994/2010."*³

This Consultation Document **aims to identify the areas where improvements to the Regulation are required** and what the various options and their impacts are.

Setting the framework

In order to set the right framework for the possible revision of the Regulation, the necessary point of departure is that Europe's least vulnerable areas are those where there are a substantial number of suppliers, from different sources and through different routes, active on a functioning and liquid wholesale market. The most vulnerable areas on the other hand often first and foremost suffer from a lack of infrastructure needed to enjoy diversification of supply and to develop a functioning market.

The extent to which the market can be relied upon to ensure security of supply impacts to a very large degree the need for and the nature of security of supply measures. It must be borne in mind that despite the fact that the process of revising the Regulation has been inspired primarily by the risk of a disruption of Russian supplies, this risk is – as demonstrated by the stress test exercise – not equally large in all parts of Europe.

Therefore, a **one-size-fits-all approach is not appropriate**. On the contrary, a degree of flexibility needs to be foreseen in order to adapt the measures applied and their timing, depending on the functioning of the gas market in the respective Member States and regions (e.g. availability of gas from diverse sources or connection to other markets). In order to secure gas supply in the most effective and efficient way in all areas of Europe it is thus necessary to take into account the different level of exposure to a supply crisis and to define the appropriate measures both in advance and during a crisis.

While the Stress Test Communication has shown that functioning markets are the key to secure gas supplies, it has also shown that well-coordinated actions by Member States, in particular in case of an emergency, can significantly increase supply security. The Consultation therefore also aims at verifying to what extent the coordination of national security of supply measures can be improved. This concerns not only better coordination of national *mitigation* actions in case of an emergency, but also of national *preventive* measures, such as proposals for better coordination of national storage or LNG policies, which can be of strategic importance in certain regions. It will also explore specific measures to foster solidarity

³ http://ec.europa.eu/energy/doc/nuclear/2014_energystresstests_securityofgassupplysegluation_report.pdf
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between Member States in security of supply matters⁴.

Set-up of the Consultation

The set-up of this Consultation Document is drafted in a way that follows the existing structure of the Regulation based on two pillars: **prevention and mitigation**. On the prevention side, the questions put forward not only aim to gain insight in whether improving existing provisions is necessary, but also give room to test new ideas, most notably with regard to the application of measures in satisfying the *supply standard*. On the mitigation side, the objective is to ensure that Member States are prepared to manage an emergency situation and in doing so consider efficient coordinated solutions rather than adopting a purely national approach, resorting to radical counter-effective measures impacting neighbouring countries.

PART I

PREVENTION

1. Infrastructure

Physical connection between production and consumption areas is a prerequisite for European security of supply. The Regulation contains two main elements that aim to ensure a sufficient degree of infrastructure: the N-1 Infrastructure Standard and the obligation to install physical reverse flow capabilities at interconnection points.

a. The Infrastructure Standard N-1

The N-1 infrastructure standard is an indicator to verify if a given system may be overly reliant on a single pipeline or underground storage facility. The rule – based on the example from the electricity sector – obliges those Member States who are dependent on a single import pipeline, underground storage facility or other type of essential infrastructure, to make sure that demand on extremely cold days can be covered even if the main infrastructure fails. In some cases more than one country is exposed to a given critical infrastructure (e.g. a common import pipeline). For this reason a *regional approach* to N-1 seems to be more adequate.

The N-1 rule must be complied with from 3 December 2014. At that time, most of the Member States had identified critical infrastructure in their Emergency Plans and complied with the standard. However, there were 6 Member States – in addition to the three exempted countries (SE, LU, SI) – that do not reach the required standard.

An often heard criticism is that the standard does not in itself increase security of supply even if it gives that impression. In fact, the standard only produces effects in that it is used as element of the supply standard (see Part I.4 below). The following questions aim at gathering views as to the added value and appropriateness of the N-1 standard in its current form.

⁴ For instance by making the obligation under Article 11(5) (a) and (b) more operational ("Member States shall not unduly restrict the flow of gas within the internal market and avoid measures that endanger the situation in Member States in a crisis situation").

Questions

1. *Is the current N-1 rule fit to ensure a sufficient level of infrastructure for security of supply purposes or do you believe that an alternative measure replacing the N-1 standard should be investigated? (e.g. broader infrastructure adequacy assessment at regional or pan-European level similar to e.g. ENTSOG Winter Outlook)?*
2. *Is a regional approach to N-1 needed? If so, in which cases would it be appropriate and how should regions be defined?*

b. Reverse Flows

The Regulation obliges all new interconnectors to be bi-directional and obliges TSO that relevant existing cross border points should be bi-directional by 3 December 2013 (i.e. allowing physical reverse flows). This is an important and often cost-effective instrument allowing for major redirection of gas supplies in case of important gas supply disruptions from the usual direction. Bi-directional capability also seriously enhances security of supply of a Member State concerned and can be an efficient solution for increasing interconnection capacity and facilitating trade.

The necessity and justification for the introduction of each reverse flow is determined by a procedure involving neighbouring Member States. Competent Authorities may grant an exemption in case the bi-directional capacity would not significantly enhance the security of supply of any Member State or region, or if the investment costs would significantly outweigh the prospective benefits for security of supply. The Commission has the power to require the amendment of the Competent Authority's decision in case there is a discrepancy with the opinions of the other Competent Authorities concerned.

As reported in the aforementioned review on the implementation of the Regulation, the share of bi-directional cross-border interconnection points within the EU has increased, but **some major interconnection points in the EU remain not equipped with bi-directional capability**. The majority of interconnection points which were unidirectional in 2009 remain so. At the same time, there may be good reasons in cases where exemptions were granted.

Questions

3. *Do you believe that reverse flow is offered at all points where it is needed? If not, why (what are the main obstacles)? At what points could it increase supply security in a tangible manner?*
4. *As concerns exemptions from the reverse flow obligation⁵:*
 - a) *Should these provisions be clarified and/or strengthened?*
 - b) *Should the relevant authority analyse the benefits of reverse flows along the whole transportation corridor?*
 - c) *Should affected Member States even beyond the immediate borders be involved in the assessment?*

⁵ See notably Article 7(4) (a) of the Regulation.

5. *Is the current review possibility - every two years, in the framework of the revised Risk Assessment - sufficient or should there be more regular checks whether market conditions justify an exemption?*

2. Improving Risk Assessments and harmonising Preventive Action Plans

Risk Assessments serve to analyse exceptionally high gas demand and supply disruption scenarios and to categorize the threats and hazards into high-, medium- and low-risks. It also examines the fulfilment of the infrastructure and supply standards, and it should identify the interaction and correlation of risks with other Member States in a cross-border dimension. The Risk Assessment is the basis for both the Preventive Actions Plan and the Emergency Plan, because the specific measures described in the latter must address the various threats and hazards identified.

The Preventive Action Plans aim to identify those measures that help to avoid or at least reduce the probability of the occurrence of the identified risks. The measures included in the Preventive Action Plans must be market-based as they cover a period of 'business as usual' in which the regular market is still functioning and able to supply customers.

The current Regulation provides for rather general descriptions of the specific information required. Experience has shown that Risk Assessments and Preventive Action Plans of Member States are very heterogeneous in terms of content, scenarios and focus and they are not harmonized. This often makes the cooperation between Member States difficult and inefficient. There is a need to improve the quality, usability and Member State interoperability of Risk Assessments and Preventive Action Plans.

Also the administrative handling of the different plans (including the Emergency Plans under Article 10) has proved complex, in particular when it came to the implementation of the key idea of the Regulation, namely the **coordination** of the plans. Missing translation rules and the different timing of the submission of national plans made the exchange of plans with neighbours difficult in practice, leading often only to rudimentary consultation.

As announced in the report on the implementation of the Regulation, the Commission considers proposing measures to improve the content as well as the consistency of the Risk Assessments and Preventive Action Plans, for instance by providing templates that include mandatory elements to be filled in by every Member State. These elements should allow for an adequate description of the situation of each Member State, allowing for comparison and thus potentially forming the basis for increased cooperation.

Questions

6. *Are the Risk Assessments and Preventive Action Plans in the current format satisfactory means for identifying and preparing for supply risks? What core elements could a possible template for the Risk Assessment and a Preventive Action Plan contain (e.g. concrete harmonised scenarios to be addressed, similar to the Energy Stress Tests, etc.)?*
7. *How can the existing cooperation obligation be improved?*
 - a) *Do you think that regional plans for Risk Assessments and Preventive Action Plans should be obligatory in the EU or at least in certain regions? If you believe that regional plans should be introduced: how should the regions be defined (e.g. criteria, who should coordinate the process)?*
 - b) *Should – at least in vulnerable regions – an obligation to agree on how to share gas in case of a supply crisis with neighbours with whom a common supply infrastructure is shared be included in the plans?*
8. *Do you have proposals to simplify the administrative procedure for the Risk Assessments and Preventive Action Plans (and Emergency Plans), e.g. in terms of translation or alignment of the timelines? Should Risk Assessments, Preventive Action Plans (and, possibly, the Emergency Plans) be merged into one document and the procedural rules aligned respectively?*

3. The "Supply Standard" for protected customers

The "supply standard", as set out in Articles 8 and 2(1) of the Regulation, aims at ensuring that Europe's most vulnerable "protected customers", as defined in Article 2(1) of the Regulation⁶, continue to be supplied with gas even under highly demanding situations, such as prolonged periods of extreme cold, a failure of a major supply infrastructure or disruptions from a major upstream supplier⁷. It aligns the minimum (and maximum) levels of protection for vulnerable or protected customers⁸ in all Member States. The supply standard thus ideally makes these circumstances "business as usual" for protected customers – but at the very least dampens their impact. Therefore, the moment at which non-market-based emergency measures have to be resorted to is postponed and the market can function better because the responsibilities are clear.

There is a large degree of discretion on the part of the Member States regarding the implementation of the supply standard. What is clear is that it is the Competent Authorities that have to identify the undertakings on which the various obligations are imposed. It is however left to the Member States to decide in which way the standard is imposed and how it

⁶ DSO-connected households and, if provided by Member States, SME's and district heating installations within certain limits.

⁷ Arguably, disruptions of supply from a major source may have the same effect as the latter if the "major supply infrastructure" is inextricably tied to a single source. This was effectively the case in 2009 when gas flow from Russia via Ukraine ceased for reasons other than a technical failure.

⁸ See below, Section 4.

is (deemed to have been) met. “Measures” to implement the supply standard can therefore range from no additional rules (given an existing balancing and other regulatory and legal regime), to a system of (incentive-driven) penalties/fines, to storage obligations, strategic stocks or LNG-related measures.

The questions regarding the Supply Standard can be divided into three categories: a) questions about the level of protection set by the current standard, b) questions about the way in which the standard is enforced and c) questions about the measures that are foreseen to be applied in order to meet the standard.

3.1 Questions about the level of protection set by the current Supply Standard

This first group of questions aims to ascertain views on the general role and effectiveness of the (harmonized) supply standard in contributing to security of gas supply in the EU.

Questions

9. *Do you think the current supply standard is defined and set appropriately with a view to ensuring that the objective of securing supplies to protected customers is met, taking into account sufficiently of differences in terms of vulnerability between Member States? Please substantiate your reply. In case you do not think that the supply standard is defined or set appropriately: what alternative design/tools could be envisaged to ensure the gas supply to protected customers? Please substantiate your reply.*
10. *Do you think that the scenarios defined for the calculation of the standard in Article 8(1) to (c) are still valid (for all Member States) or should they be modified? Please substantiate your reply.*
11. *Do you think that increased standards (e.g. manifested in longer and more severe disruption scenarios) would be beneficial or could ultimately jeopardize the security of supply in other Member States by reducing the liquidity in gas markets? Please substantiate your reply.*

3.2 Questions about implementation and enforcement of the Supply Standard

The current supply standard is "result-oriented" in the sense that it imposes a certain level of protection to be ensured in all Member States without prescribing how to achieve it⁹. Thus, the standard ensures a common protection level for all EU citizens while acknowledging the existing differences between Member States' situations and approaches to security of supply.

An often heard criticism of the supply standard is that it is difficult to implement and hard for Competent Authority to assess whether it is actually met. For instance, it can be questioned how feasible it is to *ex ante* ensure that an undertaking is actually able to deliver on his obligation. Competent Authorities have stressed in this respect that gas markets have changed from a system of long-term contracts between few players to a system of liquid gas trades via hubs in large regions of the EU. The Report on the Implementation of the Regulation is clear

⁹ This is the reason why the existing supply standard cannot be regarded as an EU gas storage obligation.

that: "Very often basic information to verify the fulfilment of the standard is missing – in particular the level of consumption of protected customers within the total gas demand (e.g. for SMEs, where a 20% cap applies). Information on the legal rules to implement the standard remains rudimentary. Data on the final use of gas and demand variations in different temperatures – is often absent as well. Member States have pointed to difficulties in interpreting the supply standard as one of the reasons for the missing information. Discussions in the Gas Coordination Group have highlighted that some Member States struggle with the practical implementation and enforcement of the supply standard".

In implementing the standard some Member States have opted for the introduction of a system of detailed ex ante checks of the means and instruments proposed by the undertakings whereby they often resort to "indirect" implementation modalities via specific measures, which will be discussed further below. Other Member States have adopted regimes that rely on the ability of the market to deliver supplies under the scenarios described.

Questions

12. *Do you think that the result-oriented approach should be maintained or should the supply standard become more prescriptive in how the implementation and enforcement should be carried out? Please substantiate your reply, taking into account the effects on prices, liquidity, competition and security of supply.*
13. *To what extent can a more active role of the Competent Authorities in the monitoring of the supply standard contribute to resolve the identified issues, notably should the Competent Authorities permanently verify that measures/means to meet the standard put forward by undertakings are appropriate? If so, how can this practically be realised, without unnecessarily limiting cross-border trades and liquidity?*
14. *Should all undertakings be treated equally or should for instance small undertakings be exonerated from the obligation to comply with the supply standard? Please substantiate your reply.*

3.3 Questions about the measures used to meet the Supply Standard

As underlined in the introductory chapter of this paper, market functioning and security of supply mutually reinforce each other: a market will function better where a transparent and non-discriminatory security of supply framework is in place and the security of supply level increases where a well-functioning, liquid wholesale market is able to attract multiple suppliers and investments where they are needed most.

In countries where the market functions well, undertakings that have to meet the supply standard tend to rely on contracts rather than physical means (such as storage) to demonstrate compliance to their Competent Authorities. The theory is that in a well-functioning market in times of scarcity and high demand prices will rise and will thus attract additional supplies to alleviate the stress. In such cases therefore the implementation and enforcement of the supply standard leads to either no or only very limited and well-circumscribed further specific

measures instituted by Member States. An example of such a regime is the UK's "VOLL"¹⁰-regime, see Box 1 below.

Box 1 – The gas security of supply significant code review¹¹ in Great Britain¹² (Source: CEER)

In Great Britain, reforms have been developed to ensure that imbalance prices in a gas emergency provide appropriate incentives on gas shippers to balance supply and demand. These reforms ensure that imbalance prices remain dynamic throughout an emergency, with no cap on prices. If smaller consumers (e.g. domestic households) are interrupted, this would be treated as a balancing action by the system operator, and priced at an estimate of the Value of Lost Load. Funds recovered through imbalance charges would be used to make payments to interrupted consumers.

These reforms focus on improving the efficiency of price signals and transferring risks from consumers to shippers. Incorporating the cost of an emergency into market prices can create appropriate incentives on market participants (including storage users) to deliver supply security. It ensures that the most efficient actions are taken and that the strength of the incentive is proportionate to the risk of an emergency.

Questions

15. *Do you think the supply standard should be met by the undertakings responsible as a “going concern” in the context of their regular, day-to-day supply activities? Please substantiate your reply.*
16. *To what extent can normal market conditions be relied upon by the undertakings responsible to ensure that they will meet the supply standard even in case of supply disruptions?*
17. *How can the ability of undertakings to supply protected customers be checked in a "hub-based" gas world in practice, in particular:*
 - a) *To what extent can (long and/or short term) spot market contracts be checked in a "hub-based" gas world in practice?*

¹⁰ VOLL = Value of Lost Load

¹¹ The significant code review introduces the concept of Value of Lost Load (VoLL) into the regime in Great Britain. VoLL can be defined as the price that consumers would be willing to pay to maintain gas supply. In theory, if gas prices increased above this level, consumers would rather have their supply curtailed or disconnected than receive an additional unit of gas. More information can be found at: <https://www.ofgem.gov.uk/gas/wholesale-market/market-efficiency-review-and-reform/gas-significant-code-review>

¹² This Box is from CEER's Public Consultation on the draft CEER Vision on Regulatory Arrangements for the Gas Storage Market (http://www.ceer.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/GAS/CEER_Vision_Gas_Storage/CD)

- b) *How can a monitoring system avoid detrimental effects from disproportionate guarantees/certificates for future supplies?*
- c) *Under what circumstances can a monitoring system based on incentives/sanctions (i.e. without ex ante checks and guarantees) such as described in Box 1 be effective? If so, what role should competent authorities have under this approach?*

18. *In order to protect the level playing field on the market, it may be appropriate to entrust the transmission system operator with the role of supplier of last resort under certain predefined circumstances and in compliance with strict criteria. To what extent would such an approach be commendable in your home market (please indicate which market that is)?*
19. *The current supply standard obligation under Article 8 and 2(1) of the Regulation is a national obligation. Is the current approach sufficiently open to cross-border solutions or could a "regional" approach to the supply standard for protected customers be considered in the Regulation?*

On the other side of the spectre there are Member States in which a functioning market cannot reasonably be relied upon, for instance because there are very few suppliers active and there is an non-level playing in the flexibility tools these suppliers can reasonably get hold of. In such regimes, more physical measures to ensure the availability of gas are often required. These often relate to **storages**¹³. A variety of different government measures relating to storage are applied in the EU.

Storage measures

In some systems, for instance, in France and Poland, **storage obligations** are imposed on shippers obliging them to have certain level of stocks available at specified times (e.g. at the beginning of the heating season)¹⁴. See Box 2 for a description of the French system.

¹³ An idea put forward in the stress test communication related to lowering the storage tariffs as a market based way of incentivizing storage use. This issue is however taken up in the context of the Tariffs Network Code development and will therefore not be subject to questions in this document.

¹⁴ CEER describes storage obligations as follows: "*Storage obligations place an obligation on market participants to procure storage based on their customers or portfolios and ensure that a certain level of gas is in store at a specified time. The rationale for introducing storage obligations is to alleviate a presumed failure of the market to properly anticipate on the need for storage in case of tension between supply and demand. The drawback of storage obligations is that they may distort price signals and the economic valuation of storage based, among other things, on seasonal price spreads in wholesale markets. The risk is that price volatility is reduced, thus distorting the price signals and the efficient functioning of the market. Storage obligations could act as a barrier to entry for new market players, perpetuate market concentration or stifle competition. Such obligations, where necessary, should therefore be used and designed carefully in order to minimise restrictions on when injections/withdrawals from storage facilities can take place, which could prevent market participants from responding efficiently to market signals. Such restrictions could hamper market participants' ability to manage their portfolios, distort the merit order for flexibility and prevent storage from being fully optimised. Storage obligations can reduce the market value of storage, which may have a negative impact on security of supply.*"

Box 2 - Storage obligations in France¹⁵

Ministerial order No. 2014-328 of 12 March 2014 provides that, every year, normative consumption profiles associated to each category of final consumers are defined, and used to calculate the rights of each supplier to get access to a certain quantity of storage capacity, based on its portfolio.

Every year, by 1 November, all suppliers have to store a volume of gas amounting to no less than 80% of their storage capacity rights related to their consumers connected to the distribution network. The storage capacity rights take into account both the volume and the withdrawal rate needed.

The Ministerial order No. 2014-328 also provides that Transmission System Operators (TSOs) have priority access to storage capacity through a specific contract for flexibility and security, in order to comply with their public service obligations.

Another measure, less frequently used due to the significant costs¹⁶ of such system, is the so-called **strategic stock**, which refers to the stockpiling of natural gas which is destined to be used exclusively in emergency situations, hence inaccessible under normal market conditions. Box 3 explains the way in which a strategic stock has been implemented in Italy.

Box 3 – Strategic storage in Italy¹⁷

Legislative Decree No. 164/2000 (which started the liberalisation process of the Italian gas market) defines the strategic storage as the storage aimed at facing potential shortages or reductions in supply or crisis situations of the gas system. According to Article 12, paragraph 11-bis of the above mentioned Decree, as amended by the Legislative Decree No. 93/11, and Article 1, paragraph 1, of the Ministerial Decree of 29 March 2012, costs underlying the strategic storage service shall be borne by gas producers and importers on the basis of a share of their produced and/or imported gas volumes. That share is defined annually by the Ministry of Economic Development taking into account the capacity developments of both import infrastructure and national production. Charges to be applied to producers and importers are defined by the Italian national regulatory authority, AEEGSI (Resolution No. 149/2012/R/gas) through a variable unit called CST that is paid by the above parties to storage operators. The total amount of strategic storage is settled by the Ministry of Economic Development on an annual basis and in consultation with the Emergency and Monitoring Committee of the natural gas system. For the storage year 1/04/2014 – 31/03/2015, the total amount is 4.620 mln Smc.

¹⁵ This Box is from CEER's Public Consultation on the draft CEER Vision on Regulatory Arrangements for the Gas Storage Market

(http://www.ceer.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/GAS/CEER_Vision_Gas_Storage/CD).

¹⁶ Stockpiling of natural gas is expensive: the cost per unit of energy is much higher than for oil (approximately 16.7 MEUR per PJ, compared to 3.33 of oil). Source: Study on natural gas storage in the EU, European Commission DG TREN, 2008; this calculation does not include the possible development of new storage facilities for pure strategic stock purposes which may become necessary should the current storage capacity (available to the market) not be sufficient.

¹⁷ This Box is from CEER's Public Consultation on the draft CEER Vision on Regulatory Arrangements for the Gas Storage Market (http://www.ceer.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/GAS/CEER_Vision_Gas_Storage/CD).

Increased reliance on LNG

A possible alternative to storage measures is an increased reliance on LNG. The Stress Test Communication has shown that access to LNG supplies will be crucial in case of a sustained supply crisis and highlighted that: "*LNG is clearly the import source with the biggest potential as LNG terminals in the EU have sufficient capacity to allow new LNG volumes to be shipped in. From a commodity perspective, the global spot LNG market is large enough to provide additional volumes and so is the shipping sector. In addition, recent drops in Asian LNG prices have made LNG a more economic alternative for the EU. Nevertheless, given that in times of disruptions and scarcity the price of LNG will rise, acquiring spot cargoes may be expensive. Moreover, it may require at least one week for a shipment to arrive in the crisis area.*" Thus, LNG has clear advantages, but important question marks surround its true added value.

Diversification obligation

Another possible measure to implement the supply standard which does not relate to storage is a "**diversification obligation**", i.e. an obligation on shippers to diversify their supply portfolio in case the overall gas supplies to the country from a single source surpass a certain threshold (e.g. 60% in Spain).

Common "pooling" mechanism

Finally, there are new ideas being proposed aimed at implementing the supply standard in a **more coordinated** manner at a broader regional or EU-wide. For instance, a **common / coordinated reserve "pooling" mechanism** at regional or EU level has been put forward. Such schemes could include for instance the joint construction and/or use of storage or LNG infrastructure, the joint purchase of LNG flexibility options, pre-agreed price contracts or storage capacities, with the aim of ensuring a greater efficiency as well as potentially profiting the combined buying power. Such capacities could be acquired to ensure meeting the supply standard or they can be held in reserve for emergency situations.

Joint purchasing

It has also been proposed to consider **joint purchasing** mechanisms in crisis situations as a tool to secure gas *in case of an emergency*¹⁸. The possibility to allow for joint purchasing agreements in crisis situations is meant to facilitate the quick access to gas volumes in case of a physical supply interruption (e.g. agreements between wholesalers aiming at filling strategic storage or acquiring extra LNG volumes in case of a crisis). Such mechanism must, however, respect the limits of EU competition rules.

¹⁸ Such a possibility, limited to a crisis situation, has to be distinguished from proposals to allow joint purchasing of gas under normal market conditions. Such a proposal concerns general aspects of competition law and market functioning and is not subject of this consultation.

Questions

20. Please provide your substantiated view relative to the various implementation forms of the supply standard currently in use throughout the EU today. Please indicate your experience with these measures (i.e. storage obligations, strategic stocks, diversification obligations) and consider factors such as overall costs, effectiveness, enforceability, impact on market, competition and prices and compatibility with other SoS measures.
21. Which role could LNG play in situations where the market cannot be relied upon to fulfil the supply standard:
- Can it play a role in effectively addressing an emergency situation? If so, in what form?
 - What are the main barriers for LNG to play such a role (e.g. destination clauses, transparency, price)?
22. The range of available measures to ensure the supply standard is much wider in mature markets than in non-mature markets, where further regulatory interventions may be required:
- Do you agree that there could be a need to differentiate between mature and non-mature markets for meeting the supply standard? If so, how should mature and non-mature markets be defined?
 - Do you think that an obligation of diversification for those Member States that are highly dependent on one single supplier should be considered and what would be an appropriate level of diversification (e.g. a percentage or a minimum number of sources)?
23. How can regional solutions be fostered where they are more efficient than individual national solutions? Should legal measures (e.g. obligation to evaluate regional solutions) be considered? How should the costs of such regimes be shared?
24. How could a coordinated gas reserve mechanism be designed:
- How could a mechanism that pools gas storage ("virtual" shared reserve) across Member States be designed? Please describe such mechanism in detail.
 - Is there a need for joint gas or LNG purchasing agreements between different gas companies? Do you see rather benefits or risk of such joint purchases in an emergency situation?
 - Should such mechanisms be regional or is there a case for an EU-wide mechanism? Who would be the actors in such systems and what would be their role (companies, Member States, EU)?

If badly designed, non-market-based measures may have an adverse effect on market functioning and, in markets where the market is not mature yet, they may even prevent the market from developing. For instance, the storage obligation regime as described above could act as a barrier to entry for new market players or have the effect of strengthening the position

of the historical incumbent supplier. Intelligent regulation may, however, prevent such side-effects, for instance by ensuring the measures comply with certain criteria related to their proportionality, necessity and openness.

25. *Do you agree with the possible conditions for non-market-based measures listed below? Which conditions would you add or delete?*

- *they can only be used when it is demonstrated that gas traders are not able to provide the necessary supply standard.*
- *they can only be used at a national level if no solutions for shared use of storage resources with other Member States is possible*
- *it should be ensured that the measure is open to participation of suppliers from other countries.*
- *the capacities should be acquired on a non-discriminatory basis (tender) and should take into account cross-border sources of flexibility.*
- *the TSO(s) is most likely to be the best placed person to acquire such means given his control over the system, overview of the flows and independence.*

26. *Should the distinction between market-based and non-market-based measures be further clarified? Should the use of non-market-based measures be restricted, for instance by being made subject to the fulfilment of certain criteria and regulatory oversight?*

PART II

MITIGATION

4. Protected Customers and Solidarity

As explained above, the Supply Standard is there to ensure that the 'protected customers' are supplied even under critical conditions. In other words, they provide for a **minimum degree** of protection of vulnerable customers in the EU.

It is important to note that provisions concerning protected customers in the Regulation also contain certain **limits to the freedom of Member States** to declare customers as protected: the group of customers that can be declared as "protected" is restricted to the neediest consumers. While protection of DSO-connected **households** is mandatory under the Regulation, Member States have a limited margin of discretion to add other customer groups to the group of protected customers. Member States may include (1) SMEs and essential social services provided that they do not represent more than 20% of the final gas use in the country and/or (2) district heating installations to the extent that they deliver heating to households or other protected customers and are not able to switch to other fuels.

The main underlying reason for this definition of a **maximum protection level** is the idea of solidarity: exchanges of gas in critical times to countries where gas is most needed can only

happen if Member States do not declare their entire gas consumption as "protected"¹⁹. Article 7 and 2(1) of the Regulation therefore incorporate an inbuilt solidarity mechanism. It provides for a certain harmonisation of the different national maximum protection levels in order to keep cross-border flows possible in times of scarce gas supplies. The Review Report on Regulation 994/2010 however demonstrated that the group identified as protected customers largely differs among Member States and that the majority of Member States go beyond the category of households and use the flexibility of the Regulation to include either or both of the possible additional categories (SMEs and social services and/or district heating).

This divergence could have a negative impact on the possibility for cross-border measures to arise as solidarity with the protected customers in a neighbouring country can only come about when the groups in both countries are reasonably aligned and result in a comparable level of protection. If Member States keep all their gas for themselves in case of a crisis without considering possible needs from Member States, gas will not flow where it is needed most. As the Stress Tests demonstrated, increased cooperation and coordination can greatly enhance the efficiency in dealing with a disruption, reducing costs and allowing the market to work longer by ensuring the regionally most cost-effective measures are applied.

A possible measure could be an obligation for Member States for a stepwise approach in case of a supply crisis, according to which should first provide gas to their protected customers, but they would first need to verify whether protected customers in neighbouring countries are still at risk of not being supplied before further gas should be provided to domestic non-protected customers. Such a mechanism could be considered an implementation of the solidarity obligation contained in Article 11(5) ("don't limit gas flows unduly, putting neighbours at risk"). It could provide for a mechanism in which gas could still flow to where it is most needed in a crisis situation and the situation that borders are closed while protected customers are not being served in neighbouring countries - without endangering domestic protected customers in the exporting country.

Additionally (or alternatively), coordination obligations could be introduced (EU wide or in vulnerable regions) according to which Member States would have to negotiate bilateral agreements on how to deal with imminent disruptions of protected customers (in terms of measures, sharing of costs, procedures, role and responsibilities, and agreeing on a jointly acceptable supply standard). Such measures could also prevent that some member states neglect their protection and simply "free-ride" on the protection measures of their neighbours.

Questions

27. Concerning the definition of protected customers:

- a) Do you believe that there is a need for a more harmonized definition of protected customers and their consumption? Please substantiate your answer.*
- b) Should the definition of protected customers be stricter in order to avoid that single Member States declare almost all customers as protected?*
- c) What do you think about a regional definition of protected customers (e.g. in closely interdependent areas)?*

¹⁹ An additional reason for this limitation is the practical consideration to limit the necessary volumes for the supply standard obligation, i.e. the smaller the protected consumption volumes, the longer reserves or emergency measures can sustain supplies.

28. *In some 'meshed' distribution grids it is technically difficult to make a physical separation between protected and non-protected customers: What could be a solution to limit the protection to the actually protected customers (e.g. orders to non-protected DSO-connected customers not to consume gas, shielded by sanctions, etc.)?*

29. *Do you see merits in laying down one or more of the following solidarity measures:*

- a) an obligation on Member States to agree upfront on bilateral or multilateral crisis measures to deal with imminent disruptions of protected customers (e.g. sharing of costs, roles and responsibilities, etc.), in order to prevent alleged "free-riding";*
- b) a prohibition for Member States to close their borders or reduce interconnection capacity in case protected customers on the other side of the border are still at risk (combined with efficient provisions against "free-riding" such as upfront agreements, see a))?*
- c) What other solidarity measures do you believe can improve levels of security of supply without unnecessarily impacting market functioning?*

5. Emergency Plans

The Regulation obliges Member States to prepare and notify to the Commission Emergency Plans, which must be updated every two years²⁰. The Emergency Plan focuses on those situations when the amount of gas provided by the market is not enough to cover all demand; it governs the roles and responsibilities, the information exchange schemes and the course of action to be taken by the authorities, gas supply companies, transmission system operators, consumers and other players.

National Emergency Plans must be exchanged and consulted between Member States to ensure that the national measures are feasible and compatible. In its Report on the implementation of the Regulation the Commission noted that although almost all Competent Authorities exchanged and consulted their draft plans with each other, these consultations were carried out merely to "tick the box" and without substantial dialogues between the Member States. In addition, there was little focus on common or coordinated actions in the case of a supply disruption and the cross-border impact of national measures were not taken into account to the necessary extent.

A way to ensure focus on a region as a whole and to enable the identification of common and correlated risks which more than one Member State might face would be the establishment of Regional Emergency Plans by Member State Competent Authorities. This would ensure that

²⁰ Or if necessary even more frequently. The Emergency Plans were to be updated by the end of 2014.

there are no (national) measures endangering the gas supply situation in another Member State or restrict the cross-border access to relevant infrastructure as well as avoid the situation when several national policies aim at the very same source or route of gas in a supply shortfall. The (Regional) Emergency Plans could consist of national and regional chapters with cross-border relevance.

The Stress Test conducted by the Commission in summer 2014 provided positive experience regarding regional risk assessment and planning²¹. The question remains how to define the regions and who should determine their composition.

In the past practical difficulties such as language difficulties or significant time difference in the establishment of the plans hindered cooperation. Also the depth of analysis, level of data and robustness of the plans varied significantly. In order to draw up (Regional) Emergency Plans in a consistent, coherent and comparable manner the Commission could provide a template for mandatory use by the Competent Authorities, as also proposed for the RAs and PAPs.

The Commission's tools to coordinate actions are under the existing Regulation limited and it has currently a mainly facilitating role. In order to detect crucial flaws or inconsistencies in the plans a proposal could be to increase the role of the Commission, for instance by obliging it to undertake a consistency check of the regional plans.

Questions

30. *Do you agree that the development of emergency plans at regional level would be an appropriate way to ensure consistency and to enable preparation to react to common and correlated risks? How should the regions for security of gas supply be best defined? Please substantiate your reply.*

a) *Should mandatory regional emergency plans complement the national emergency plans or replace them?*

b) *Do you think that a template for regional emergency plans would ensure that more detailed and relevant information is provided (e.g. similar to the template used in the recent Energy Stress Tests)?*

6. Declaring an Emergency

a. National Emergencies

The Regulation foresees a definition and a number of possible national "crisis levels", with three different levels indicating the severity or likelihood of the crisis in each Member State ("Early Warning", "Alert", Emergency"). The declaration of early warning and alert levels before an emergency level is meant to put affected stakeholders, Member States and the Commission on alert, but can currently not trigger non-market based interventions. When undertakings are no longer able to procure and transport enough gas to the market, the

²¹ The Baltic States and Finland as well as the UK and Ireland are providing joint Emergency Plans (and Preventive Action Plans).

Competent Authority must declare an emergency and may put in place "non-market based" measures which administratively reduce gas consumption to the level of available supply.

When the Competent Authority declares any of the crisis levels, it shall immediately inform the Commission and provide it with all the necessary information in particular on the action it intends to take. The Competent Authority should follow the predefined action of the Emergency Plan. This is to ensure predictability and proper preparation for the affected market players and it ensures that no arbitrary and unexpected actions are taken²². The Commission shall verify within max. 5 days, whether the emergency declaration is justified and may request the Competent Authority to modify the measures and/or to lift the declaration of emergency when it considers it unjustified²³. This request has currently no binding effect.

Experience with the crisis levels is limited, as since the entry into force of the Regulation the national crisis levels have been declared on two occasions and national emergency was declared only in one Member State. Nevertheless, the Commission's implementation report identified areas where improvement of the current framework is necessary.

In order to limit distortive effects that security of supply measures can have on the market it must be ensured that *emergencies* are declared only when a true emergency situation occurs, because this moment determines where the market ends and where the non-market based security of supply regime takes over. To ensure this, the Commission considers whether a common threshold set in the legislation should define the moment at which an emergency may be declared. Another option would be to introduce a definition of a "functioning market".

To be in the position of truly ensuring consistency of national measures, it seems important that the Commission has all necessary factual information at hand to take informed and efficient decision, in particular as the Commission has the responsibility to verify – within 5 days – whether the national declaration of emergency has been made according with the Regulation. To that end the Commission could be provided with more sophisticated information tools and investigatory powers not only in an actual emergency, but also *before an emergency*., It may also be considered to give the Commission's recommendations on national measures a more binding character.

Questions

31. *Do you agree with the introduction of a threshold based mechanism or more specific indicators to trigger the declaration of the different crisis levels? Please substantiate your answer.*
32. *Should the right for Member States to intervene in markets though non market-based measures be extended to alert-level situations or remain limited to emergency situations? Should the list of possible non market-based measures in Annex III of the Regulation be changed or clarified?*

²² In duly justified exceptional circumstances, the Competent Authority may take action deviating from the Emergency Plan, in which case it shall inform the Commission immediately and provide justification.

²³ See Article 10(8) and (7) of the Regulation.

33. *Should the declaration of national emergencies be subject to an appeal mechanism, e.g. to the Commission? Should the Commission's recommendation on the national measure have a binding character?*

b. Regional or EU-Wide Emergencies

In the existing Gas Security of Supply Regulation the Commission is tasked to monitor the security of supply situation at Union level. Upon a request of several Competent Authorities that face a gas crisis simultaneously, the Commission **can declare a Union emergency or a regional emergency** for a specifically affected geographical area (the Commission has some discretion to decide which of the two emergency levels to declare), which triggers the possibility to use non-market based measures and confers a **specific coordination function to the Commissions**.

The question has arisen whether the declaration of a "Union emergency" means an automatic emergency situation in *all* Member States, i.e. whether it would automatically enable the introduction of non-market based measures in those Member States where the market is still working. The aim is to allow markets working as long as possible, which also enables the Member State in emergency to procure the necessary gas in the still functioning neighbouring markets. Such considerations could be considered in the preventive and emergency plans (while the existence of physical infrastructure is crucial). Non-market based measures should be only introduced in the Member States which declared national emergency. At the same time these Member States could invite the Commission to declare regional emergency which would make sure that the foreseen solidarity mechanisms are implemented in all involved countries.

The Commission is held to convene the Gas Coordination Group as soon as it declares a Union or regional emergency and **coordinate the action of the Competent Authorities**, in particular via exchange of information and ensuring the consistency and effectiveness of action at Member State and regional level in relation to the Union level as well as coordinating the actions with regard to Third countries. In particular, the Commission needs to verify that national measures **do not unduly restrict cross-border flows or security of supply in other Member States**²⁴.

It has been questioned whether the Commission has, under the current regime of the Regulation, **sufficient tools to get the information** at its disposal needed to monitor and recommend appropriate measures in a timely manner. The Commission welcomes in this respect the ENTSOG project establishing an early warning system which could be the basis to further develop information exchange and coordination of actions, corresponding to the defined regions, see ENTSOG Early Warning System (EWS) with an Early Warning Team East (EWT-E) currently; an expansion to other geographical areas, at least North-West Europe, is proposed.

²⁴ See Article 11(5) of the Regulation.

Different solutions have been suggested who should carry out the monitoring functions (e.g. Member States, regional bodies, Commission), and to what extent cooperation ENTSO-G and other associations is needed.

Questions

- 34. Is the current allocation of responsibilities and tasks among the Commission, Member States, TSOs and natural gas undertakings in a Union or regional emergency in the Regulation clear enough? Do you see a specific role for ENTSG or the Gas Coordination Group in a Union or regional emergency? Please substantiate your answer.*
- 35. Should clearer rules be introduced on the consequences of declaring regional emergency for those Member States where the market is still functioning?*
- 36. The Regulation currently foresees the possibility to declare only an "emergency" at regional or Union level: Do you see a need for an additional regional/EU-wide "early warning" or "alert" level?*
- 37. Should the Commission have more sophisticated information tools (e.g. a broader vision of actual gas flows in certain regions) and investigative powers in and before a regional/EU-wide emergency at its disposal in order to have the necessary information available to assess the cross-border effects of the national measures?*
- 38. Should an obligation for the regional coordination of decisions in a regional /EU-wide emergency be created?*
- 39. Are the Commission powers in case of a regional or EU-emergency sufficient or should they be increased in view of the experience with previous crises? Do we need a separate emergency body for the coordination at regional or European level?*
- 40. Should the emergency procedures of different transmission system operators be aligned in order to ensure more effective and efficient response to cross-border emergencies?*

NEXT STEPS

The questions and reflection in this consultation paper reflect our current thoughts on ensuring approaching security of gas supply in the internal market. We invite comments on all the questions directly raised and any other reflections which respondents may have.

Based on the responses we receive, and on further reflections and engagement with Member States and stakeholders, we will consider which additional measures are needed including in the form of legislative amendments.

Please, submit your response to this public consultation **by 18 March 2015** at the latest to the following e-mail address: ener-sos-revision@ec.europa.eu. The Commission intends to publish a findings document summarizing the main outcomes of this consultation. The Commission will preserve the confidentiality of the responses it receives.