

## Consultation on an EU strategy for liquefied natural gas and gas storage

**Question 1:** Do you agree with the assessment for the above regions in terms of infrastructure development challenges and needs to allow potential access for all Member States, in particular the most vulnerable ones, to LNG supplies either directly or through neighboring countries? Do you have any analysis or view on what an optimal level/share of LNG in a region or Member State would be from a diversification / security of supply perspective? Please answer by Member state / region

**Answer 1:** We consider as important to realize all the assessment and development decisions taking into account already existing infrastructure as well as regional and national specificities. Another aspect which should be considered is the fact that infrastructure only without physical availability of gas may decrease the benefits of the infrastructure as the gas may not be available when most needed. As regards the LNG we are of the opinion that LNG may be used as a diversification gas source for the seaside countries and only in limited extend for the inland countries by the use of transmission routes connecting seaside and inland countries, taking into consideration the above mentioned presumptions.

**Question 2:** Do you have any analysis (cost/benefit) that helps identify the most cost-efficient options for demand reduction or infrastructure development and use, either through better interconnections to existing LNG terminals and/or new LNG infrastructure for the most vulnerable Member States? What, in your view, are reasons, circumstances to (dis)favor new LNG investments in new locations as opposed to pipeline investments to connect existing LNG terminals to those new markets?

**Answer 2:** As we mention in our answer to the question No. 1, the investment into new projects (including LNG) should be based on cost benefit analysis taking into consideration already existing infrastructure and their benefit for the region therefore the well situated interconnectors with interconnected storage capacity could in our opinion add the highest value from security of supply point of view this could in our region include e.g. the project of Eastring.

**Question 3:** Do you think, in addition to the already existing TEN-E Regulation, any further EU action is needed in this regard? Do you think the use of LNG gas and existing LNG infrastructure could be improved e.g. by better storage possibilities, better network cooperation of TSOs or other measures? Please give examples

**Answer 3:** -

**Question 4:** What in your view explains the low use rates in some regions? Given uncertainties over future gas demand, how would you assess the risk of stranded assets and lock-in effects (and the risk of diverting investments from low carbon technologies such as renewables and delaying a true change in energy systems) and weigh those against risks to

gas security and resilience? What options exist in your view to reduce and/or address the risk of stranded assets?

**Answer 4:** -

**Question 5:** The Energy Union commits the EU to meeting ambitious targets on greenhouse gas emissions, renewable energy and energy efficiency, and also to reducing its dependency on imported fossil fuels and hence exposure to price spikes. Moderating energy demand and fuel-switching to low carbon sources such as renewables, particularly in the heating and cooling sector, can be highly cost-effective solutions to such challenges, and ones that Member States will wish to consider carefully alongside decisions on LNG infrastructure. In this context, do you have any evidence on the most cost-efficient balance between these different options in different areas, including over the long term (i.e. up to 2050)?

**Answer 5:** -

**Question 6:** What in your view are the most critical regulatory barriers by Member State to the optimal use of and access to LNG, and what policy options do you see to overcome those barriers? Have you encountered or are you aware of any problems in accessing existing LNG terminal infrastructure, either because of regulatory provisions or as a result of company behavior? Please describe in detail.

**Answer 6:** -

**Question 7:** What do you think are the most critical commercial, including territorial restrictions and financial barriers at national and regional level to the optimal use and access to LNG?

**Answer 7:** From an inland country point of view we consider as the most critical barrier the access to LNG due to the lack of sufficient infrastructure including the cross border interconnections between the countries. In this respect in our region e.g. the project of Eastring could be beneficial.

**Question 8:** More specifically, do you consider that ongoing EU policy initiatives and/or existing legislation can adequately tackle the outstanding issues, or there is more the EU should do?

**Answer 8:** -

**Question 9:** How do you see worldwide LNG markets evolving over the next decade and what effects do you expect this to have on EU gas markets? Do you expect a shift away from oil-indexed LNG contracts, and if so under what conditions?

**Answer 9:** -

**Question 10:** What problems if any do you see with the functioning of the international LNG market, particularly at times of stress? Are there specific actions the EU should take, in dialogue with our international partners, including in trade negotiations, to improve its functioning and/or to make the EU market more attractive as a destination for LNG? Could voluntary demand aggregation be helpful in some way?

**Answer 10:** -

**Question 11:** What technological developments do you anticipate over the medium term in the field of LNG and how do you see the market for LNG in transport developing? Is there a need for additional EU action in this area to reduce barriers to uptake, for example on technology or standards, including for quality and safety?

**Answer 11:** -

**Question 12:** Do you think there are any sustainability issues specific to LNG that should be explored as part of this strategy? What would be the environmental costs and benefits of alternative solutions to LNG? Please provide evidence in support your views.

**Answer 12:** -

## STORAGE

**Question 13:** What opportunities or challenges do the supply projections for different sources, in particular LNG and pipeline gas and low carbon indigenous sources, present for the use of gas storage / for gas storage operators?

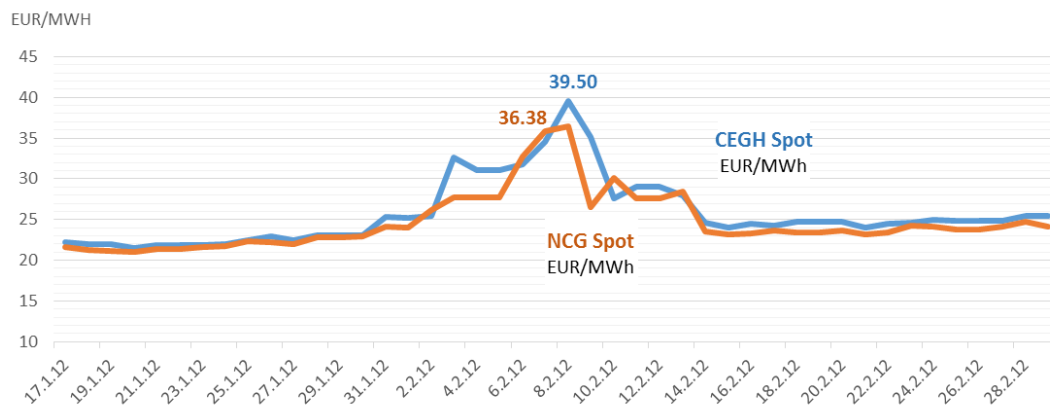
**Answer 13:** Most storage operators would agree that they have been met with more challenges than opportunities in past couple of years. The main reason behind this situation seems to be the decreasing appetite for storage, caused mainly by the collapse of summer-winter spread and an abundance of flexibility on the market. The drivers of this development can be categorized into those on the demand side (decreasing gas consumption and consumption swing), and those on the supply side (spot market sourcing, LNG supplies, storage capacity increase, gas grid expansion, production decline. The supply side drivers all provide flexibility to the market, so we can state that **storages suffer from abundance of flexibility from competing sources.**

Europe's domestic production of natural gas has been steadily decreasing. Prospects for future supply diversification, however, seem more optimistic than they were a couple years ago, and the projected loss in domestic production is being outweighed by **new potential supply**, be it from east Mediterranean production plays, Azeri gas, recent Iranian sanctions lift and, most importantly, the imminent new LNG shipments to Europe from all over the world.

As crude price has lost 60% of its value within a year, Asian LNG, priced mainly with crude-oil-indexed formulas, followed suit and got on par with European gas hub prices. Europe is now open to supplies from all major production zones around the world, LNG shipments are expected to rise and so is the utilization of European regasification facilities.

Diversification of supply sources by LNG and market interconnection can **increase the liquidity** on the market and hence support commercial trading with storage. More **pressure on already low summer-winter spread** and another growth of flexibility supply will, however, render storage booking unprofitable for gas traders seeking mainly short-term storage value.

As sourcing gas on hubs and exchanges gains in popularity, some market players are beginning to **rely completely on gas hubs** and storage is no longer their number one tool to cover demand swings. Although this may bring financial benefits in years with mild winters, during more severe winters or winters with cold spells this strategy can prove dangerous not only to the given supplier, but also for his clients. As the graph below shows, at crisis situations the spot price of gas can almost double and not every supplier can afford to purchase such expensive gas for increased outtakes of his clients during these days. Risk of default on supply obligations can be, however, significantly reduced with gas storage.



Gas storage is, in our opinion, a much more reliable provider of flexibility also due to its **proximity to the point of consumption**. Geographical distance should be taken into account when making decisions on a European level. In times of crisis, extra supplies of LNG may not be prompt enough even for countries at the coast, let alone those in the mainland. Gas storage has an undisputable **security value** for mainland countries exposed to supply risk, and no amount of LNG at the coast can replace it.

On the other hand, things may not be so gloomy for gas storage in terms of gas consumption. Even though it is continuously falling due to increased efficiency and economic downturn, recent system interventions in the renewables field may have rather positive effect on demand for gas. Coal and nuclear **power plants phase-out** in Germany will have to be compensated by either CCGT power plants consuming gas directly, or by more renewable sources, whose intermittency needs to be smoothed out by natural gas. New gas import routes into Europe will also require more storage capacities as support infrastructure. Advancements in energy systems, such as **Power to Gas** or hydrogen generation, open new possibilities for gas storage, too.

**Question 14:** Are, in your view, current market and regulatory conditions adequate to ensure that storages can fully play their role in addressing supply disruptions or other unforeseen events (e.g. extreme cold spells)?

**Answer 14:** As a storage system operator we consider as crucial to create a regulatory framework which enables to secure at least part of the storage capacities on long – term basis in order to create stability for long-term investments into infrastructure projects which will at the end enhance security of supply. Furthermore all the regulatory measures should respect and not endanger the most important and basic storage role in providing security of supply.

We agree with the view of Council of European Energy Regulators (CEER) as mentioned in the Security of Gas Supply (A CEER Concept Paper) from 21 July 2015, according to which CEER “advocates a solution tailored to the relevant market”. In our opinion there should not be a “one size fits all” approach, and the countries should be allowed to include some national specificities related to the way they want to ensure security of supply and to implement the corresponding rules.

We also consider important to underline the fact that storages as infrastructure operators are not responsible for security of supply but the respective market participants (suppliers) are, **whereas the storages are a tool to achieve that security, reliably**. In this respect we consider essential to enhance the controlling mechanisms concerning the fulfilment of current regulations regarding the security of supply on national as well as regional level including appropriate sanctioning mechanism for cases when the market participants responsible for security of supply should fail to fulfill their obligations taking into consideration the national specifics of the chosen measures.

Moreover, from the regulatory point of view it is also very important to create a regulatory framework which would provide a level playing field for storages with other flexibility tools and allow storages to provide new, innovative services as only booked and properly utilized storages can fully play their role in addressing security of supply issues.

**Question 15:** As an alternative to mandatory reserves, how could market based instruments ensure adequate minimum reserves?

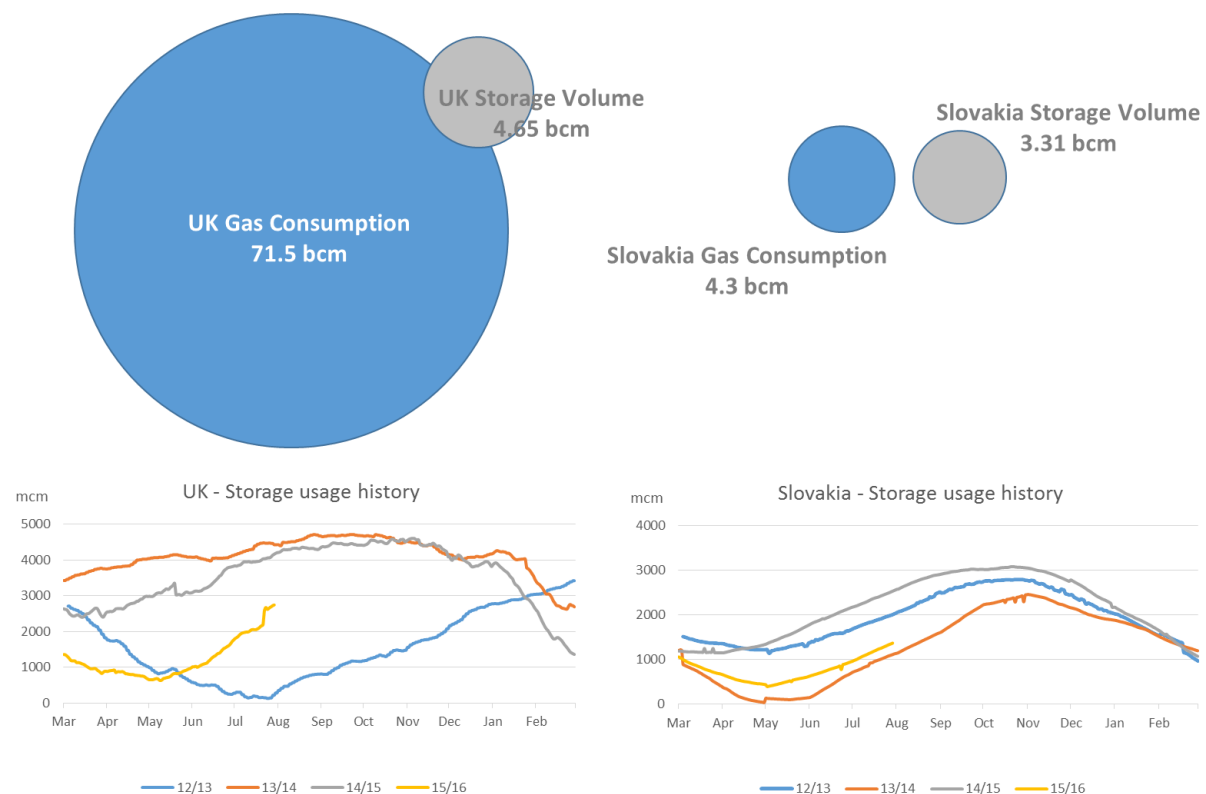
**Answer 15:** In our opinion, in an effort to ensure adequate minimum reserves, national or at least regional specificities should be taken into consideration. It is complicated to determine the appropriate volume of reserves, since it depends on a number of variables, such as the country’s gas consumption, diversification of routes and supplies, possibility to switch to other fuels etc. All of these differ between regions and from country to country. Nevertheless we are of the opinion that sufficient controlling mechanisms together with a possible sanctioning mechanism for a case that a market participant responsible for security of supply should fail to fulfill its obligations, could facilitate the achievement of the questioned target. As the controlling mechanism and sanctioning mechanism as well should be in line with the chosen security of supply measures, in this respect also the national specifics should be taken into consideration. Due to the high dependency on one gas supply

source, in Slovakia we believe that the storage should play the most important role in security of supply.

**Question 16:** Do you have any analysis or view on what an optimal level/share of storage in a Member State or region would be? What kind of initiatives, if any, do you consider necessary in terms of infrastructure development in relation to storage?

**Answer 16:**

In order to get an idea about the optimal level of storage in the given Member State, we compared yearly gas consumption with storage volume and storage usage history in Slovakia with those in the United Kingdom. The data show that the UK, with its immense gas consumption of 71.5 bcm per year survives winters with only 4.65 bcm of storage. On the other hand, Slovakia, who consumed 4.3 bcm of gas in 2014<sup>1</sup> - only a fraction of the UK's consumption, uses approx. 3.2 bcm storage – not much smaller than the UK. Working volume of the Slovakia's storages is able to cover 77% of the country's yearly gas consumption .



Hence, the “optimal level of storage” issue is another one where one-size-fits-all approach cannot be applied. The United Kingdom has access to a diversified range of supply options – its own gas production, LNG terminals and pipeline connections to continental Europe. Slovakia, on the other hand, is dependent on one gas supply source. Its storage capacities are utilized, so the 77% storage/consumption coverage is justified. Of course, not all the stored gas ends up on the Slovak market, but the level of storage in Slovakia ensures that the country is less susceptible to crisis situations. That would imply that the optimal level of storage is just “as high as possible.” However,

<sup>1</sup> Eurogas

such approach should only apply for countries with strong supply dependency. In countries with easy access to a variety of flexibility tools, support for more storage development would be unnecessary, or even harmful for storages, since we are starting to witness first cases of storage closures.

**Question 17:** Do you think, in addition to the existing TEN-E Regulation, any further EU action is needed in this regard?

**Answer 17:** In general, we believe that there is no need to take further EU action in this respect.

**Question 18:** Given uncertainties over future gas demand, how would you assess the risk of stranded assets (and hence unnecessary costs), lock-in effects, the risk of diverting investments from low carbon technologies such as renewables, delaying a transition in energy systems and how would you weigh those against risks to gas security and resilience? What options exist in your view to reduce the risk of stranded assets?

**Answer 18:** We consider the physical availability of gas as very important from security of supply point of view, especially in countries with high dependency on one supply source or low level of interconnection (low level of diversification of supply routes). Any risk of stranded assets, lock-in effects, diverting investments from low carbon technologies, but also from storage infrastructure where needed, can have negative consequences on gas storages and thus jeopardize the security of supply. Therefore a regulatory framework which would provide a level playing field for storages with other flexibility tools and allow storages to provide new, innovative services to attract market players to book and utilize storages could help to prevent the mentioned risks. Nevertheless there should be a possibility to use non market based measures if necessary in order to avoid these risks and to ensure the security of supply if depending on national basis considered as necessary.

**Question 19:** What do you think are the most critical regulatory barriers to the optimal use of storage in a regional setting?

**Answer 19:** In our opinion it is important to create a regulatory framework which would provide a level playing field for storages with other flexibility tools and allow storages to provide new, innovative services. Also a regional cooperation between member states could be enhanced.

**Question 20:** Do you think ongoing initiatives and existing legislation can tackle the remaining outstanding issues or is there more the EU could do? Do initiatives need to include additional issues further to the ones described here?

**Answer 20:** We consider as very important to create a regulatory framework which would provide a level playing field for storages with other flexibility tools and allow storages to provide new, innovative services.

**Question 21:** Do you consider EU-level rules necessary to define specific tariff regimes for storage only or should such assessment be made rather on a national level in view of available measures able to meet the objective of secure gas supply?

**Answer 21:**

Definition of specific tariff regimes for storages should, in our opinion, be made on a national level and only in respect of strategic storages controlled by a country's government. However, we see no need for price regulation of commercial storages with third party access, especially on markets with access to other domestic or foreign storages.

**Question 22:** Have you ever encountered, or are you aware of, difficulties in accessing storage facilities? Has this concerned off-site or on-site storage facilities? Please describe the nature of the difficulties in detail.

**Answer 22:** We as a storage system operator are trying to provide effective and innovative services developed in cooperation with the gas market participants reflecting their needs. We provide all the necessary information on our website (applying also the GSE transparency template) and we also provide the access to our storage on TPA rules. Based on these we believe no one should encounter such a situation with us.

**Question 23:** Have you ever encountered, or are you aware of, difficulties related to feeding LNG gas from the storage site back into the gas network? If so please describe the nature of these difficulties (regulatory provisions, company behavior, technical problems) in detail.

**Answer 23:** –