Consultation Paper
An EU strategy for liquefied natural gas and gas storage

29 September 2015

Eurogas Response to DG ENERGY Consultation on an EU strategy for liquefied natural gas and gas storage

LNG

LNG in the EU today

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 neighbouring 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

Eurogas has few comments on the Section 2 Assessment, which is largely factual. It is important that DG ENERGY takes on board the latest developments and Eurogas members can comment in more detail in this respect. Eurogas is, however, missing adequate appreciation of the fast moving developments in the east and south of the Mediterranean. LNG is an option there, but this would have to be analysed and considered against other solutions, including export to Turkey. The contribution of Eurogas to the Euromed platform is attached.

Eurogas considers that LNG can contribute to improving diversification, flexibility, and medium and longer term security of supply, complementing other supply and trading portfolio options, spot and long-term. Depending on market situations, the availability of LNG regasification capacity can enhance supply competition. It offers additional flexibility options, if for whatever reason, there is an emergency in supplies. LNG storage capacity may sometimes, in specific Member States, be used as temporary storage, capturing flows in different global routes, but the limited volumes and higher costs incurred generally make this option more suitable for peak-shaving and short-term balancing, thus offering limited impact on the overall European security of supply picture.

The main starting point of Eurogas in answering this consultation is that a well-functioning liquid market for gas in Europe will deliver supply security. Eurogas accepts that the market is not yet working as well as it should in parts of Europe, primarily because of poor implementation of legislation and interventions that distort the market. Eurogas recalls the need in the first place for priority to be given to full and proper implementation in all Member States of existing EU legislation. Tailored approaches to support supply security can be considered where a clear case has been made to address a specific issue, but these should be proportionate and should not distort the market in general or LNG and storage markets. Furthermore, proposed actions should be transparent and subject to cost-benefit analyses, and if they are not market-based their impact on the market should be monitored and there should be a clear exit strategy.

Eurogas recalls its basic position on the revision of the Security of Gas Supply Regulation, to maintain that the balance of the current approach in 994/2010, that "in a well-functioning market" it is essential that measures taken to safeguard security of supply do not unduly distort competition or the effective functioning of the market (Recital 12). LNG as well as pipeline gas contributes to the supply security of Europe's market, and a well-functioning market should underpin their availability, avoiding discrimination between them. They are just different ways of transporting gas, and the market should determine the most economic routes.

The worldwide trading of LNG means that its price is determined by buyers' and sellers' decisions, which has resulted in Europe being currently viewed as the last market place in sellers' merit order.

In addressing the issue of an LNG strategy, the global market context has to be respected. Interventions in LNG trade would distort the market, could be inefficient and very costly. Therefore an optimal level/share of LNG in any particular region should be determined by the market as a whole.

Access conditions to terminals have to be in line with the needs of a well-functioning market and infrastructure should be in place to ensure that gas delivered to terminals will be able to benefit directly or indirectly all Member States, including those which are land-locked and those most vulnerable to disruption.

The Consultation references a graph in the Annex which shows gas demand declining by about 30% by 2035. The note says that this is based on the 2013 PRIMES reference scenario amended to show the impact of RES and high energy efficiency targets. It is, however, expected that the final study will show other scenarios also with higher gas demand. To show only one scenario is arguably misleading in this context, and Eurogas is concerned that this sort of analysis implying gas demand reduction is an objective in itself will give negative messages to the gas market and upstream suppliers. Europe should be presented as an attractive market for gas.

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)favour new LNG investments in new locations as opposed to pipeline investments to connect existing LNG terminals to those new markets?

Eurogas has no cost/benefit analyses of the sort asked for. Cost-benefit project analyses will be required to answer the economics of the question, if new LNG investments are needed as opposed to pipeline investments to carry gas away from existing terminals. The outcome will depend on a number of factors, not least distances involved and the economics of the envisaged terminal. Eurogas considers, however, that in principle the potential of optimising the current infrastructure in the internal market needs to be fully explored first, to avoid non-justified investments in LNG. New additional investments may be needed, but these should be determined on a market-driven, case by case basis.

Eurogas recalls the importance of giving weight to market instruments in deciding on investments. In specific circumstances, this approach may have to be balanced with non-

commercial societal interests, notably security of supply. Benefits of projects the market is not asking for should be compared with the costs and viability of market projects, taking into consideration Europe's needs.

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

This needs to be assessed on a case by case basis. Generally it is important to optimise the use of existing infrastructure to ensure that gas flows according to market demand in the immediate hinterland and further (see the answer to Q. 1). If obstacles to optimising LNG gas and existing terminals lie in incorrect implementation of current legislation or lack of cooperation of TSOs and NRAs for whatever reason, then these aspects should be addressed urgently by the Commission with ACER's support, as remedying these should in principle offer more cost-efficient solutions than new infrastructure. Eurogas develops in the answer to Question 11 arguments for increased use of LNG in transport. A coherent policy is needed to develop a framework conducive to this potential aimed at exploiting synergies between energy and transport programmes.

Availability and access to storage facilities across Europe can also enhance the optimised use of LNG and the development of short-term products. Storage access should ensure a broader and more flexible range of possibilities than currently available.

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?

This question reflects the ongoing contradictions in DG ENERGY policies, envisaging the need for more gas infrastructure investment while at the same time reflecting reluctance to acknowledge the vital role of gas in the energy mix. Acknowledging this vital role will give positive signals to investment, and make Europe a more attractive market for suppliers, reducing the risk of stranded assets.

In addition, to minimise the risk of stranded assets, any project should be subject to a rigorous cost-benefit analysis with alternative solutions (pipeline gas or gas imported to other existing terminals).

The low-use rates of terminals mentioned in the Consultation paper (and we note there is no definition of "low") are due to a combination of factors including global market conditions. Falling demand in Europe (partly structural and in recent years attributable to mild winters) at a time of a bullish global LNG market and the price spreads between Europe and Asia are factors. Perceptions among market observers are that these price spreads are narrowing and terminal use rates are increasing. An upcoming "LNG wave" may narrow the spreads further. Eurogas also notes that a characteristic of the LNG chain is that regasification capacity is higher than liquefaction capacity, which provides the optimality that supports the LNG market.

As stated above, the use of LNG facilities depends first on shippers and market participants' commercial decisions. Use of terminals can be improved by promoting transparency and the availability of products that will contribute to regional as well as local market liquidity adding value for users. A regulatory framework that supports competition and access to LNG terminals is key to integrating terminal assets into the wider gas infrastructure and optimising their use. The internal market has to be completed across the EU, promoting the needed cross-border trading to deliver signals for an efficient use of existing assets. This will help to reduce the bottlenecks which currently prevent optimal terminal use, and ensure that gas flows where it is needed. Improved regional cooperation should address this.

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)?

Price spikes are not abnormal and may demonstrate the good functioning of markets. Eurogas does not see why there should be a goal to eliminate these or indeed reduce imports if worldwide market opportunities can make energy more affordable and secure for Europe.

Like question 3, this will depend on case by case assessments. Eurogas has no evidence. Eurogas, however, queries the statement that fuel switching in the heating and cooling sector, which is highly gas dependent would be a cost-effective solution. Eurogas recalls that gas technologies, either on their own or combined system solutions with RES offer significant consumer benefits in terms of better cost effective energy management. Eurogas supports the promotion of advanced technologies as essential for reaching EU targets, but framework policies should be fuel and technology neutral.

Potential entry barriers for LNG

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 behaviour? Please describe in detail.

Eurogas has expressed concern in the past that more transparency and product flexibility is needed. We have welcomed progress in these areas, in turn enhancing liquidity and arbitrage possibilities.

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?

As mentioned above, the ambivalent policy of the EU towards gas is a source of concern to Eurogas, and risks making Europe look unattractive as a market for gas relevant to pipeline and

LNG gas, so no distinction should be made. Furthermore, as mentioned already, transport capacity to allow access to LNG terminals is lacking, especially in parts of Europe, but this is relevant for the market as a whole and not only LNG use.

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?

It is essential to complete the internal market, by effective implementation of the Third Energy Package and associated rules, as this will also improve market liquidity and investment signals.

The development of a European Standard which eventually addresses the Wobbe index range should not imply technical and commercial barriers at national and regional level to LNG access into Europe.

International LNG markets

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?

Market observers consider that worldwide markets are evolving in a positive direction. In particular Eurogas draws attention to recent analysis by the IEA that shows a narrowing of spreads between Asian and European markets and a growing volume of spot plus short-term traded market, exhibiting a maturity that points to LNG becoming a more available source for Europe's gas supplies. The market environment will be crucial in determining to what extent the EU will be able to benefit from opportunities.

Eurogas does not comment on contract issues.

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?

Eurogas does not see any specific actions for the EU to take in dialogue with international partners other than ensure that diplomatic relations are sound and there are no restraints on global market trading through, where possible, the negotiation of free trade agreements. The EU's readiness to enter into strategic partnerships can also be supportive of entrepreneurial initiatives, promote investment, and enhance the attractiveness of the European gas market. The EU, however, should fully respect the role of companies in determining and establishing commercial relations.

Also, as mentioned above, a well-functioning market with gas playing its vital role in the energy mix will make Europe an attractive market. EU policy should recognise the significant contribution gas can make to achieving its climate and energy goals; gas is vital to reach a low-carbon energy mix. Our international partners should be confident in an attractive European

gas market, with gas holding an important role in the energy mix. This enhanced predictability will support necessary investments.

It is far from clear what is envisaged by voluntary demand aggregation, why this should have advantages, or whether it is compatible with competition law in the internal market. Eurogas would be concerned if national governments were to seek to be involved in commercial choices. A better way forward is to increase diversification possibilities (suppliers and routes) in an approach aimed at more buyers and more suppliers enhancing market competition.

LNG technology issues including LNG use in transport

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?

LNG terminal technology is developing, including floating terminals. Improved technology allows the range of services to be expanded including reloading (transfer from the terminal's tanks into a vessel or trucks) and transhipment (direct transfer from one vessel to another).

Demand for gas in transport has significant potential. Its case is supported by environmental, economic, and technological drivers. The 2011 White Paper on Transport rightly recognised the value of the development of infrastructure for LNG and its use can bring added-value in line with the Alternative Fuels Directive. Attached is our response to the Mid-term review for the White Paper which explores further LNG issues related to transport.

The advantage of Europe as the technological leader globally in use of gas for transport should be strengthened. European manufacturers produce gas-fuelled vehicles, complying with very stringent regulations. LNG (or compressed natural gas) offers advantages used in long-distance travel (the Blue Corridor project), in urban areas and in maritime transport. Projects are underway to demonstrate the suitability of the use of LNG for aviation. Rail loading, although not yet available in Europe may be an option for the future retail LNG market to deliver small quantities in rail tanks.

Eurogas has proposed a number of areas for action to help develop the market for gas in transport, some with particular reference to LNG among which

- Staged roll-outs of refuelling stations along defined long distance corridors, extending the Blue Corridor scheme. This offers a viable and sustainable alternative fuel to customers.

- In cases where network operators are required to develop the infrastructure for gas in transport in accordance with the requirements of the Alternative Fuels Directive, they should be allowed to include the costs in their regulated asset base and receive a fair return on investment. Investment, however, should preferably be market-based.

- Standards for refuelling points should be put in place as soon as possible.

LNG sustainability issues

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.

Eurogas expects LNG terminal operators to operate to the highest environmental standards and it is welcome that recent years have seen increased energy efficiency at terminals. In any case the environmental benefits of gas in replacing more polluting fuels, also in transport, will be significant.

STORAGE

Internal market constraints and challenges for 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?

Why does the heading of the section refer to constraints and challenges only? The internal market, when functioning well does not constrain storage use, but allows more options, introducing a wider range of portfolio choices, whether related to pipeline gas or LNG, than previously. Choices of users will determine the value of the flexibility that storage will provide whether it is for managing their balancing, backing up their supply commitments, or for arbitrage. Users' perceptions and understanding of market developments will differ. They will seek added-value for their portfolios, as part of their overall commercial strategies.

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)?

This question has to be seen in the context of the wider approach under discussion on gas supply security.

Eurogas has argued that at European level there is no need to change the regulatory framework for security of gas supply beyond some detailed considerations (see attached response to the EC consultation on reviewing Regulation 994/2010). If Member States opt to introduce additional obligations or requirements, these should rely on market-based instruments, and therefore not distort the market or lead to undue costs. SSOs should offer flexible products and appropriately competitive tariffs at delivery points to ensure storage use remains a competitive part of the flexibility market. In a well-functioning market, competition among the flexibility instruments should deliver the most economic and efficient solutions for suppliers to meet the requirements of the supply standards. This implies the need for appropriate regulatory conditions, that allow a level playing field for storage among other flexibility instruments. The way storage technical performances are set by SSOs influences the levels and types of bookings. For example if the injection/withdrawal capacities are not very attractive for suppliers, then they may turn to other solutions in the flexibility market. Therefore SSOs should offer more products that are more flexible and responsive to the needs of the market.

In view of the seasonal nature of gas demand and the relevant market, storages have developed close to centres of consumption. A more regional-based approach, with enhanced cross-border dimension may have a role to play in improving regional opportunities. In any case a stable and predictable regulatory climate, conducive to investment in storage and other flexibility possibilities is essential.

Regulatory as well as market conditions can affect the perceived value of storages and Member States operate different storage systems which can lead to different analyses on how to address questions surrounding storages. Market participants depending on the relevant market and their needs, identify different values for storage, flexibility, arbitrage, and security of supply. The market conditions and signals at a particular time as well as the regulatory framework will be key determinants of the way storage is used, but overall this should be part of users' commercial strategies and reflect the appetite of market participants for risk (arbitrage value) and security of supply (insurance) value. At the same time the value of storage use can extend beyond the benefits afforded to a simple user, the system value. This extended value is less visible, and therefore there may be fewer incentives to realise it.

Some Member States may consider that, for security of supply reasons, storage use is not currently optimised in market conditions, although there is no agreed definition of "optimal" as it will vary according to market circumstances. This point notwithstanding, in such cases proportionate tailored regimes to complement the market may be justified in the short-term when a clear case has been made. This is addressed in more detail in the answer to 15.

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

Eurogas has argued that reserve mechanisms are not the answer at EU level. Eurogas considers that organising any such mechanisms across Member States would raise very complex issues. It is not clear what the features of such a reserve would be, how it would function or be governed or paid for.

Eurogas has never supported strategic storage at an EU level as this could be cost inefficient and cause problems for the commercial storage market. Eurogas recognises that some Member States may wish to consider measures such as "monitoring" level (a level is set below which stocks should not fall) strategic back-up stocks, or impositions of other specific mechanisms related to storage. Any such solutions should be transparent, proportionate, seek to avoid market distortions, and be responsive to market structure and developments. Therefore clear criteria for such schemes coupled with proper stakeholder consultation on such measures and their market impact, are needed also. Interventions should not act as disincentives to cost-efficient use of storage.

As mentioned under 14, Eurogas considers that a well-functioning market providing cost-efficient flexibility in supply is the best means to ensure adequate reserves, providing that the value of storage is reflected in its price. Booking behaviour will depend on the market circumstances.

From a number of Member States, however, there is feedback that either the market has not been sufficiently developed to optimise storage use or there is a lack of confidence that the supply security objective is met, in particular that there are adequate incentives for storages

to be filled from a security of supply perspective.   As their current regimes may not be delivering the wished for reassurance or cost too much, alternatives are currently under examination in some Member States. Eurogas welcomes this readiness to engage in new thinking and ventures some initial thoughts on this development.

The starting point of Eurogas remains that "one size will not fit all". Different national and regional characteristics may mean that a regime applied in one Member State might not work well in another. As mentioned above, how markets balance demand and supply should primarily be a commercial decision and the relevant market in storage as for other flexibility instruments should not be constrained by borders. Within this framework Member States should continue to have discretion to argue for market-based complementary measures, if it can be demonstrated that there is a security of supply issue, even after the requirements of current legislation have been met. These merit further consideration by the Commission in a tool-box approach, to be assessed as mentioned above against a range of pre-determined and transparent criteria, preferably set by the Commission at EU level, after consultation with stakeholders and Member States. These would have to be discussed further, but could encompass proof that there is a security of supply issue, which is not addressed by fully implementing the Third Package and associated rules. The approach should also evaluate cost benefits of the proposed solution, benchmarked against other solutions, benefits to the transmission system, support of cross-border trade and entail no undue market distortions.

Eurogas recalls the importance for a storage market to be underpinned by transparency, including on formation of storage tariffs, and an ability of storage operators to develop a range of products to suit market needs, short as well as long-term.

Storage Infrastructure

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?

As mentioned in the response to Q. 14, there is no definition of "optimal".

Eurogas has no cost/benefit analysis of the sort asked for, and if the question relates to infrastructure development, then as for question 2 case by case project analysis is required.

The word "infrastructure development" in relation to storage may refer to new storages and/or transport infrastructure in the storage region. There seems to be adequate storage capacity in Europe, but access issues, especially cross-border, seem to require in some cases to be resolved, as we have argued above for LNG (Q. 4).

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

No further EU action is required, only a firm resolve to follow-up on the policy of promoting well-functioning national and regional markets.

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 and weigh those against risks to gas security and resilience? What options exist in your view to reduce the risk of stranded assets?

See the answer to Question 4 for general remarks.

Storages perform different functions determining their values at particular times. Providing that the functions are market-driven and gas can play its essential role in the energy mix, then there is less risk of stranded assets.

Therefore, far from contributing to any so-called "lock-in" effects, or "diverting investments from low-carbon technologies", a gas storage market, serving users varied needs, contributes to the flexibility offered by gas use. This lends added-value to the low-carbon market, including the power market in which gas is used to support variable renewable energy. Therefore the either … or … implication of the question reflects a faulty premise.

Regulatory framework and potential barriers for storage

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

Barriers to the optimal use of storage in a regional context are similar to those barriers which prevent cross-border trading in general, lack of optimised flows at borders, (congestion, mismatched capacity either side of an IP, non-market interventions by authorities). These can all be addressed in actions to ensure implementation of the Third Package and in the ongoing work on implementation of codes and rules.

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?

There is no need for further EU level legislation, over and above some modifications to Regulation 994/2010 to clarify and strengthen its objectives, and enforcement of correct implementation of other relevant current legislation including the Third Package.

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?

Eurogas argued in the preparation of the Harmonised Tarification Code that there could be no one-size-fits-all approach at EU level to transmission for storage entry/exit points tariffs. We rejected any idea of EU level of incentives to storage as detrimental to a level playing-field in the flexibility market, but recognised that as storage markets are different in different Member States some discretion should be left to NRAs in order not to penalise access through the networks and promote the injection of gas into storage facilities. The current approach under discussion in the Tariffs Code to include a Secondary Adjustment for storage merits consideration.

Eurogas recalls that Member States have the discretion to decide between NTPA and regulated TPA for storages, an approach we have supported.

In general, with regard to storage products, SSOs should offer transparent and competitively priced packages.

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.

As an Association, we have not been made aware of specific problems.

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 behaviour, technical problems) in detail.

This is a question for companies.