

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

Gas Natural Fenosa 's response

GNF welcomes the EC Commission's consultation on an EU strategy for Liquefied natural gas and gas storage.

Regarding LNG we strongly believe that the LNG could play an important role to support diversification of EU Supply sources, ensuring a secure, affordable and sustainable EU energy system.

LNG will offer significant advantages for improving supply diversification and competitive pricing in Europe and thus, it might reinforce the common energy market and security of supply, provided that adequate regulatory frameworks are in place.

The massive entry of new LNG production from US and Australia, together with the consolidation of Qatar in the late 2000s, will diminish the market share of Russia in Europe. However, European supply structure will only evolve gradually and mutual dependence with Russia and Algeria will remain a distinctive feature, due to their geographical proximity and the relevance of their political stability (related with its economic dependence on Oil and Gas).

We take this opportunity to stand out a potential stream of work of the Union for the Mediterranean (UfM) Gas Platform, the role of LNG in the Mediterranean, which should be seen as a connecting element of the gas market. There is a growing application of LNG for maritime transport and GNF would welcome further efforts to develop these markets.

An integrated European gas strategy should fully exploit the advantages of the ongoing transformation of the global LNG industry: promote liberalization, open hub markets and interconnections –and LNG terminals which assure security of supply and access to competitively priced gas.

It would be an ideal time to develop an European plan of investment in gas infrastructure, mainly based on the existing ones, which would have the double advantage of optimizing the internal gas market and building a common hedge to geopolitical risks.

LNG

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

We agree with the assessment presented in the consultation:

- While there is ample spare capacity available in import facilities to Western, several Eastern Europe countries lack access to the more diversified supplies of North – Western countries, and find themselves commercially dependent on Russian gas.

- As a result of the deficit of Trans-European interconnection capacity in some regions, the excess of entry capacity in certain countries cannot be used as backup for other countries.
- The fact that network planning has been historically executed within the national domain has prevented a truly European gas network to emerge.

This assessment identified specific infrastructure bottlenecks inside EU that prevent the optimal use of existing LNG plants and the contribution of the LNG to the security of supply targets. In concrete, point 2.3 related to North-South Interconnections in Western Europe, states that “LNG capacity available in the Iberian Peninsula cannot reach the rest of the EU because of bottlenecks and network constraints between Spain and France ...”. In this sense, we would like the EC to consider the benefits that to build MIDCAT could proportionate from a diversification/security supply perspective.

MIDCAT is a PCI which provides significant benefits in terms of security of supply for the EU and to complete the internal market.

- Identified as PCI (09.01.2014)
- Identified as critical in the “European Energy Security Strategy”
- Identified as priority project according to the TEN-E: “NG2: The pipeline between Algeria-Spain-France and continental Europe (of which MEDGAZ)”
- The reinforcement of FR gas network on the Africa-Spain-France axis (linked to MIDCAT) obtained 75 million€ funds from the European Energy Programme for Recovery even though MIDCAT was not built.

MIDCAT encountered significant barriers in the 2010 Open Season

- There was an artificial increase in investment costs
- The demand was lower than the threshold fixed by the French Regulator

In this context and for future developments, it is key that the Commission checks that the costs incurred by TSOs are efficient. In addition, it is not envisaged that market players acquire new binding commitments in an open season. Therefore, the development of key projects for the security of supply of the EU and for the completion of the internal market, such as MIDCAT, cannot be any longer based on commercial decisions of market players.

In the same point 2.3. of the consultation document, EC states that current PCIs are addressing the internal South to North bottlenecks in France. It should be noted that the merger of French zones (Val de Saone, Gascone-Midi) is:

- National project decided to avoid the sustained prices differentials between Northern and Southern France
- It does not allow accommodating additional gas flows from MIDCAT interconnection.
- The alternative cluster Val de Saone-Eridan which allows the development of MIDCAT was rejected by the French regulator.

In addition, infrastructures linked to MIDCAT are already built in Spain. The interconnection is the only part missing. For this reason, the Spanish consumer should not bear the costs of

infrastructures developed in neighborhood Member States as they already support the costs of the infrastructures linked to the Algeria-Europe corridor developed in Spain.

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?

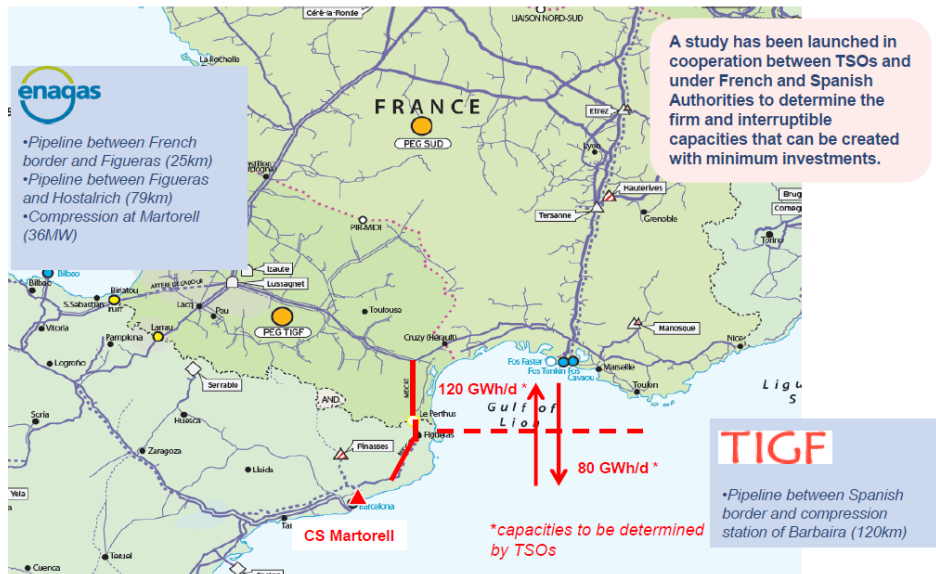
There is ample spare capacity available in import facilities to Western Europe, which were initially designed for peak consumption in the boom years of Combined Cycles. Therefore, we believe that a specific plan to face supply disruptions should be developed at European level, based on a thorough analysis of storage, interconnections, and transit and entry infrastructures. Such plan:

- should be based on an integrated view with the common objective of optimizing existing infrastructures (like Iberian peninsula LNG terminals).
- would not necessarily lead to macro-investments but to closer economic coordination among countries to value their availability to guarantee global security of supply

In that sense we refer a study launched in cooperation between French and Spanish TSOs and under French and Spanish Authorities and presented in the 22nd South Gas Regional Initiative, to determine the firm and interruptible capacities that can be created to increase the interconnection between the Iberian Peninsula and France with minimum investments. The investments to increase such interconnection and to allow the gas flow to move from West to East are marginal (main investments of the corridor have already been done) compared to other projects. Medgaz (in operation by the end of 2010) and the reinforcement in the Spanish gas network that has already been developed implies that there is just a missing link, MIDCAT, which will provide additional 7,1 bcm Spain to France.

This criteria is fundamental in a scenario of economic crisis and scarcity of resources. The marginal investments to connect Algeria and the well diversified Iberian Peninsula LNG supplies with the rest of Europe are one of the lowest in the EU.

In addition, the timing is key. This project could be in commercial operation in a couple of years and could avoid situations just like the last Russian gas crisis.



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

We recall the importance to optimized the use of existing infrastructures. If obstacles to this are found due to the lack of cooperation of TSOs and NRAs, they should be addressed by the EC.

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?

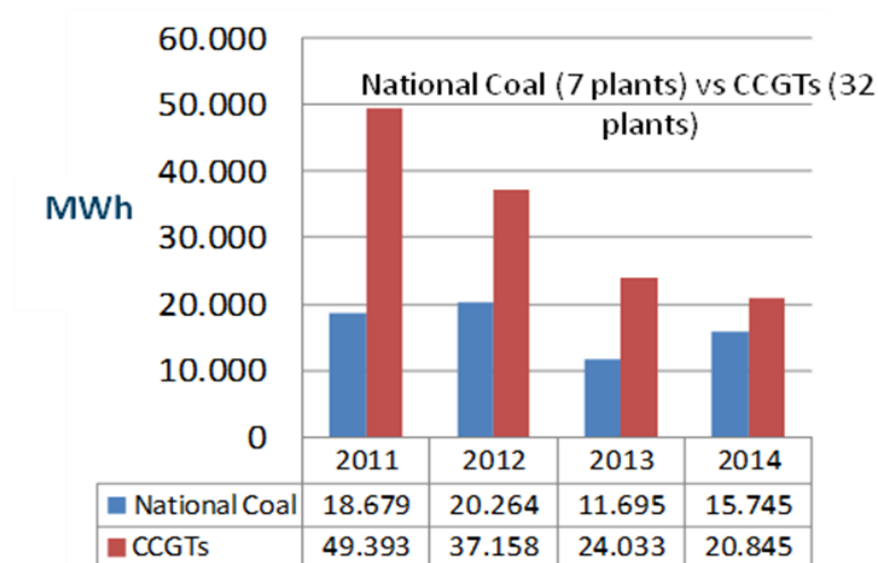
Natural gas is an abundant global resource, widely exploited by an industry which is set to continue its growth history for decades; it should keep a decisive role in the European Energy matrix and should be a cornerstone of European Climate policy to reduce Carbon emissions, mainly in two key aspects:

- Natural gas is crucial to achieve the displacement of coal as fuel for power generation
- The deployment of Renewable Energy Sources is linked to the availability of Combined Cycles to complement intermittent solar and wind power.

However, due to the European economic crisis and other factors, the weak CO₂ prices are not effective in driving carbon emission abatement in the power sector and in using gas as the most environmental friendly fossil fuel. Surprisingly, coal production has increased which goes undoubtedly against EU's 2030 climate targets.

Energy and Climate policy framework should provide a reliable signal for investments and the use of gas instead of coal in line with its vision.

In addition, the Commission should also notice that gas infrastructure and RES development are interdependent. National climate and energy objectives could be endangered if there is not an integration of generation through sufficiently interconnected markets. Lack of sufficient interconnection capacity could be seen as a barrier to meet targets in a cost efficient manner. The economic burden for consumers could be unacceptable if markets are not duly integrated due to insufficient interconnection



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)?

Member States' heating and cooling sectors vary considerably in terms of climate conditions, seasonal demand, average demand per type of customer, underlying infrastructure, sources of energy available, building stock, purchasing power, market participants and access to finance. Even within Member States, different heating and cooling options could be suitable depending on the type of consumer, e.g. certain appliances could suit in rural areas but not in urban dwellings. Sensitivity analysis to these crucial factors should be analyzed. They are critical to determine and to compare the cost efficiency of energy policies.

The environmental contribution of specific sectors also differs a lot between countries. For instance, in 2012, transport sector was responsible of 28% of Spanish emissions (average of 24% in the EU) and residential sector was responsible of 6% (average of 11% in Europe). This means that one-size-fits-all European policies have broad different environmental results, as well as different costs. For instance, A blanket approach would be a suboptimal solution considering that the demand of heating and cooling varies significantly between Member States. This margin of manoeuvre is reinforced where the level of exposure to gas SoS is far from being the same across Europe.. For Iberian countries, on the contrary, it would be more interesting to promote CO2 abatement in transport compared to others.

Therefore, for the sake of cost efficiency as well as to tap the potential for decarbonisation of countries, the so called strategy for heating and cooling should let sufficient margin of manoeuvre to Member States.

To be more precise, Spain and Portugal have a greatly diversified gas portfolio, benefitting from multiple sources and routes. Besides this, Spain and Portugal are among the countries with lowest heating consumption across Europe (4th and 2nd with lowest heating consumption per dwelling in 2012, far below the EU average). This implies that a common European heating and cooling strategy would have a great economic impact in these countries (long payback of investments or low rate of return of investments), it would contribute very little to the decarbonisation objectives (compared to other priority sectors) and would have a fully negligible impact on the increase of gas security of supply in the Iberian region.

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.

Currently, in a context of over capacity there are not significant barriers to access to LNG terminals.

In addition CEER's Status Review on monitoring access to LNG terminals published in October 2014 found that generally there was no contractual congestion and that all EU LNG terminals have properly functioning congestion management procedures

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?

In many LNG supply contracts there is a clause which sets the gas destination as a fixed one. This makes it not possible to re-route ships to destinations with LNG deficit.

Currently there is a very complex scheme of guarantees which varies for each plant operator. The administrative process would be easier with the establishment of a homogenous model throughout Europe.

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?

First of all, it is essential to complete the internal market, by effective implementation of the Third Energy Package and associated rules.

In addition, we would like to refer to the Gas quality harmonization issue. The development of a European standard for gas quality should not imply technical and commercial barriers at national and regional level to the access of LNG into Europe.

To implement a Wobbe Index range too narrow would not allow part of the current LNG supplies and also part of the potential sources to be imported into Europe, with the following consequences:

- A reduction in the diversification of supplies, impacting the security of supply in case of natural gas shortage from current sources, in contradiction with the EU supplies goals.
- A reduction in the flexibility of supplies in Europe, moreover taking into account the new LNG liquefaction facilities that are currently under construction in the world and new LNG import terminals that are under construction in several European countries.
- Favors some sources to the detriment of others, in other words it is discriminatory.

The option of forcing to do costly investment to adapt gas to the new specification would raise the prices paid by the consumers, mainly in those countries which are importing LNG without having any problem with the different qualities of the imported gas.

Therefore, in our view, the Wobbe Index range to be included in the European gas quality standard should never be narrowed beyond the one established in the EASEE-gas CBP but allowing an implementation period to be defined at National level on which national impacts can be analyzed and taken into account.

The Commission should do all it best to contribute to increase the supplier's portfolio of the EU instead of reducing them. The EU cannot lose any opportunity to reinforce the resilience of the EU gas system if we want to effectively face the menace put on our security of supply.

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?

Positive perspectives in LNG are widely expected to continue in the long term: BP Energy Outlook forecasts LNG to grow more than 4% p.a. up to 2030 and to raise its share of world gas consumption from 9% to 15%, which means that the already complex LNG world map will be more and more interlinked .

Europe's share of global LNG imports rises from 16% to 19% between 2013 and 2035. This increase is motivated by the reduction of the domestic production by 2% p.a. in UK and Holland (Groningen) and the need of gas as a backup for renewable increase in a context where Europe continues to pursue its ambitious low-carbon agenda.

The surge of numerous LNG export projects in North America, together with the expansion of the Panama Canal, will improve the connection between the Pacific and Atlantic Basins. European and Asian buyers are negotiating (and signing) long term contracts from the US which are indexed to Henry Hub, introducing therefore an index diversification in their LNG supply portfolios. Also, in parallel, UK's National Balancing Point (NBP) has become in the recent years the main price reference in Europe not only in pipeline gas trade but also in some LNG supply contracts.

Although LNG is still far from becoming a commodity traded globally, the current market uncertainty is driving many players towards a diversification of price indexation (Henry Hub, NBP, JKM, even Coal...), as a way of mitigating price risk. But as long as oil products continue representing an alternative fuel to gas/LNG, it is very likely that oil indexation will remain in a substantial number of long term supply contracts.

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 demand will grow more than 4% per year for a period from 2014 to 2030. The traditional regasification terminals can also develop other activities as reloads supplying LNG for small scale LNG vessels and trucks. It is forecasted an increase in loading terminals for the approach future.

Due to the increasingly restrictive pollution politics, LNG is well known as the cleanest alternative for fuel oil and marine oil. Another well valued option is gas to liquids.

Policies¹ to improve air quality make a stronger case to move to natural gas, the only alternative to diesel oil in heavy transport. There is room to consider the Mediterranean Sea an Emission Control Area, ECA and to develop this initiative within the UfM Gas Platform.

In addition, from a technical point of view, the technology is ready and consolidated

- Technology for natural gas engines has continued to develop, being now in the third generation, more performing and with the same or less maintenance costs than diesel.
- New generation of vehicles are becoming more attractive
- More and more powerful NG truck engines to be available in coming months, making them fit for long distance transport

¹ The European Union is promoting the use of alternative fuels with the Directive 2014/94 on the deployment of alternative fuels infrastructure

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?

The storage tool has the advantage of being a physical asset located close to demand areas guarantying the real time availability that in certain moments could be required. No other tools (long term contracts, hub transactions, ...) guarantee this immediate availability (flexibility of long terms contracts is limited, market liquidity is not infinite ...). Besides, it has the potential to maximize pipeline imports. As keeping gas in storage is not always the best economic alternative, in order to avoid that market participants take the risk at the expenses of consumers' rights, Member States could decide to impose some storage obligations to market participants.

Some low carbon indigenous sources, (like the renewable ones) are less regular and unpredictable, and that gives an opportunity for gas storages because natural gas has to make the backup and ensure the necessary operational flexibility.

Further diversification of supply and increased flexibility of LNG supply are factors that can limit gas storage needs.

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)?

In our view, first of all, there is too much regulatory fragmentation in relation to gas storage in the EU. There should be a common regulatory philosophy throughout the EU in order to equalize competitiveness between the different Member States.

The common regulatory philosophy should consider and reflect the dual purpose of underground gas storage:

- .- To prevent emergency situations, which could be solved by setting minimum strategic gas stock obligations.

- .- To cover the operational needs of flexibility of the gas system, which could be left in the hands of the system agents, because there are many possible alternatives, e.g. underground storage versus flexibility in supply contracts.

Taking into account the particular characteristics of each gas system,(interconnection, number of LNG plants, diversification...) the needs of gas strategic stock could be defined for each case.

In order to solve the failure of the market to provide appropriate levels of security, it is necessary to put in place some regulation. This regulation could be the obligation of having in storage a part of the sales at the beginning of winter. The measure would not hinder or distort

competition since would affect equally to all the market participants and will provide some price stability in case of disruption of supply.

In addition to that, it will be useful to keep some strategic reserves (by the government or by market participants) that will only get extracted in case of severe events of supply interruption.

[Question 15: As an alternative to mandatory reserves, how could market based instruments ensure adequate minimum reserves?](#)

Security on Supply crisis in 2009 showed that some kind of intervention might be justified to prevent future similar crisis. A one fits all solution does not exist and Member States are in the best position to set the most appropriate measures. In order to ensure SOS, Member States can decide to put in place on market participants storage obligation that can only be used in an emergency situation.

We believe that any intervention must be transparent, non discriminatory, publicly known and minimize the impact on the functioning of the wholesale market. Besides, it should only been established in storage facilities with regulated access.

Once that unexpected events (supply disruptions or adverse weather conditions) are covered, we agree with CEER recommendation regarding delivering security of supply through market mechanisms.

[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?](#)

The appropriate level of security should be different among member states, taking into account their different specificities, this is, different percentage of indigenous gas production and other factors that could cause a fail of supply.

The optimal level of storage should allow to ensure the continuity of supply for a reasonable period of time (two/three months) taking a greater disruptive event as hypothesis, e.g. failure of the main supplier/supply infrastructure..., It also should be taken into account, the situation of the supply/demand of the region (diversification, interconnection ...) In this sense, it is necessary to make technical analysis in order to be able to determine the minimum gas stock level needed.

Fulfilment of Storage Obligations in a country should not be restricted to the storage capacities of that country: storage capacities in an adjacent country and import capacities should be considered equivalent.

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

According to the European experience, a project (e.g. an LNG plant) that has been able to obtain the environmental permits from a national regulatory body, can be blocked, even

cancelled, because any other local administrative body hampers it. In some cases this might be understood as a measure of pressure that can result on the cancellation of the project due to local opposition. If projects are supposed to be evaluated according to their contribution to aspects as diverse as security of supply, increase of market integration and competition, connecting renewable generation, etc, administrative bodies shall make their best to speed up the work on the eldest and best ranked projects. It is hard to understand the policy of some Member States as they seem to foster and speed up the permits of some national facilities while they seem not to be very active on facilitating others. Therefore, we consider the political and administrative willingness is crucial to carry out the projects. We also believe that the European Commission should have an active role on supervising the cross-border projects (including the necessary reinforcements of the national networks) so they are not unnecessarily hampered.

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?

See the answer to Question 4

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

- Storage tariff: sometimes high and not transparent. It would be desirable for users to be able to distinguish the different components of the storage services (capacity, injection, withdrawal). Also, the distinction between storage and transmission fees.
- Poor transparency in access condition is a major issue for storage users and may result in a barrier for entry to new market participants. The lack of transparency in access conditions may strengthen and hampers market development.

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?

Cross subsidy between different services should be prohibited, e.g. recovery of shortfalls in storage through variable transportation charges is essentially wrong and further undermines Security of Supply.

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?

The gas legislative framework in the EU provides the possibility for Member States to choose between regulated and negotiated access in order to adapt the best solution to the different market models in the European Union. The requirements and conditions of the two different type of access are different. Bearing that in mind, if any regulatory intervention, such as,

storage obligation and strategic storage, is required by Member States, the third party access should be regulated. No storage obligation should be imposed with negotiated access. Stocks should only be kept in storages with regulated access tariffs. This will not distort competition because all undertakings are facing the same storage cost. Negotiated storage is a tool valid only for commercial purposes and is not compatible with storage obligations where storage prices may be a barrier for new undertakings.

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.

We do not see major difficulties in accessing storage